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FILE 'HCAPLUS' ENTERED AT 17:27:59 ON 03 FEB 2006
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FILE COVERS 1907 - 3 Feb 2006 VOL 144 ISS 7
FILE LAST UPDATED: 2 Feb 2006 (20060202/ED)
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This file contains CAS Registry Numbers for easy and accurate substance identification.

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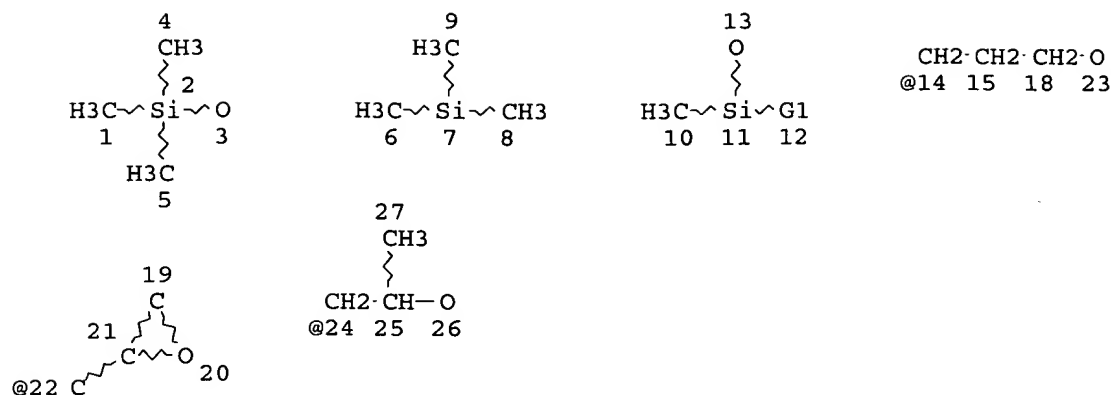
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=> d stat que
L11 STR
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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 8
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STEREO ATTRIBUTES: NONE
L13 107479 SEA FILE=REGISTRY SSS FUL L11
L14 STR
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DEFAULT ECLEVEL IS LIMITED

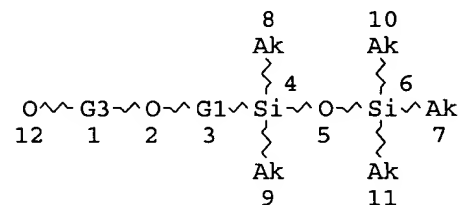
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NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L15 STR



REP G1=(1-4) C

REP G3=(2-4) C

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DEFAULT ECLEVEL IS LIMITED

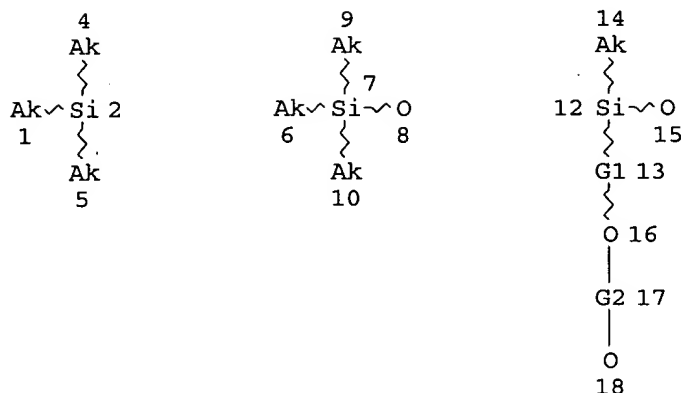
GRAPH ATTRIBUTES:

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NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L16 STR



REP G1=(1-4) C

REP G2=(2-4) C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 1715 SEA FILE=REGISTRY SUB=L13 SSS FUL L14 OR L15 OR L16

L18 1163 SEA FILE=HCAPLUS ABB=ON PLU=ON L17

L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR "ALMOND (PRUNUS AMYGDALUS)"/CV OR ALMONDS/CV OR "ANACARDIUM OCCIDENTALE"/CV OR "ANACARDIUM OCCIDENTALE NANUM"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE NANUM)"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE) (L) FLOUR"/CV OR "CASHEW (L) FLOUR"/CV OR "FLOURS AND MEALS (L) CASHEW FLOUR"/CV OR "BERTHOLETTIA EXCELSA"/CV OR "BRAZIL NUT"/CV OR "BRAZIL NUT (BERTHOLETTIA EXCELSA)"/CV OR "BRAZIL NUTS"/CV OR BRAZIL-NUTS/CV OR "CARYA ILLINOINENSIS"/CV OR CASHEW/CV OR "CASHEW (ANACARDIUM OCCIDENTALE)"/CV OR JUGLANS/CV OR BUTTERNUT/CV OR "JUGLANS AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA AILANTHIFOLIA)"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA CORDIFORMIS)"/CV OR "WALNUT (L) J. AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) J. AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "JUGLANS AUSTRALIS"/CV OR "JUGLANS BOLIVIANA"/CV OR "JUGLANS CALIFORNICA"/CV OR "JUGLANS CATHAYENSIS"/CV OR "JUGLANS CINEREA"/CV OR "JUGLANS GUATEMALENSIS"/CV OR "JUGLANS HINDSII"/CV OR "JUGLANS MAJOR"/CV OR "JUGLANS MANDSHURICA"/CV OR "JUGLANS MICROCARPA"/CV OR "JUGLANS NEOTROPICA"/CV OR "JUGLANS NIGRA"/CV OR "JUGLANS OLANCHANA"/CV OR "JUGLANS REGIA"/CV OR "JUGLANS REGIA FALLAX"/CV OR "JUGLANS REGIA MEMBRANICA"/CV OR "JUGLANS REGIA ORIENTALIS"/CV OR "WALNUT (JUGLANS REGIA FALLAX)"/CV OR "WALNUT (JUGLANS REGIA MEMBRANICA)"/CV OR "WALNUT (JUGLANS REGIA ORIENTALIS)"/CV

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L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)L19

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=> d ibib abs hitstr l21 1

L21 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:169579 HCAPLUS

DOCUMENT NUMBER: 138:397546

TITLE: The effects of surfactant and water volume on the  
coverage of the seed surface by a seed treatment  
formulation

AUTHOR(S): Maude, S. J.

CORPORATE SOURCE: Crompton Europe Ltd, Worcestershire, WR11 2LS, UK

SOURCE: BCPC Conference--Pests & Diseases (2002), (Vol. 2),  
507-514

CODEN: BCDCAE

PUBLISHER: British Crop Protection Council

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An image anal. system has been developed (Maude, 2001) and used to determine  
the extent of treatment coverage on seed. The effects of varying  
application parameters on coverage have been investigated and a clear  
relationship between coverage and efficacy of a fungicidal seed treatment  
established. Equimolar concns. of different types of surfactant  
(nonionic, anionic and silicone based) have significantly different  
effects on coverage and biol. control. Varying the concentration of surfactant  
also affects coverage and efficacy. Low surface tension and low contact  
angles give rise to improved wetting and spreading of the treatment on the  
seed surface. Where a seed treatment alone gives poor coverage of seed,  
this can be significantly improved by dilution / co-application with water.  
This correlates with significant improvements in biol. control.

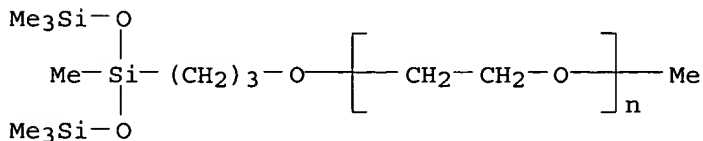
IT 27306-78-1, Silwet L 77

RL: MOA (Modifier or additive use); USES (Uses)

(surfactant and water volume effect on coverage of **seed** surface  
by **seed** treatment formulation)

RN 27306-78-1 HCAPLUS

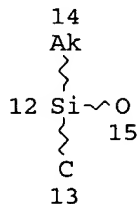
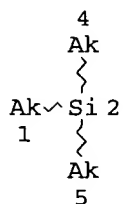
CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

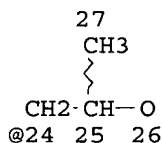
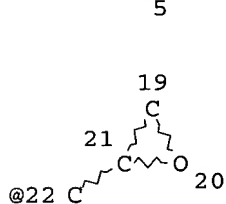
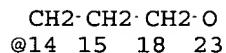
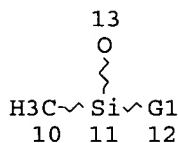
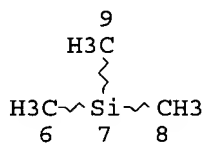
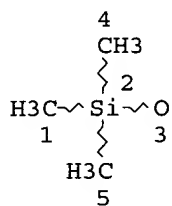
=> => d stat que l22  
L11 STR



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GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 8

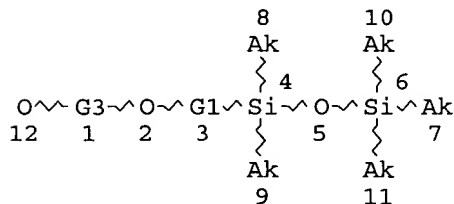
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 L14 STR



VAR G1=14/22/24  
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 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE  
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REP G1=(1-4) C  
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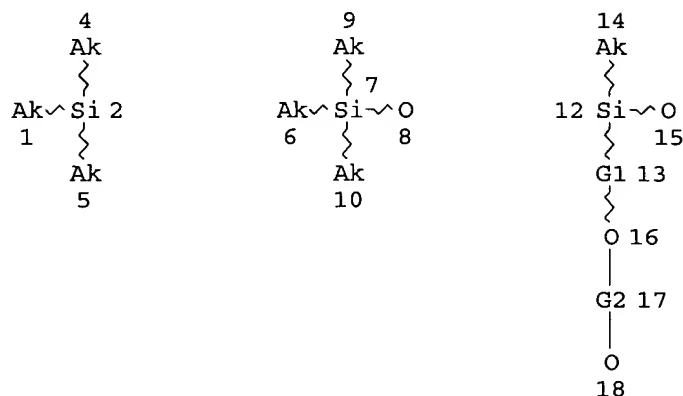
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NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L16 STR



REP G1=(1-4) C

REP G2=(2-4) C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 1715 SEA FILE=REGISTRY SUB=L13 SSS FUL L14 OR L15 OR L16

L18 1163 SEA FILE=HCAPLUS ABB=ON PLU=ON L17

L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR "ALMOND (PRUNUS AMYGDALUS)"/CV OR ALMONDS/CV OR "ANACARDIUM OCCIDENTALE"/CV OR "ANACARDIUM OCCIDENTALE NANUM"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE NANUM)"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE) (L) FLOUR"/CV OR "CASHEW (L) FLOUR"/CV OR "FLOURS AND MEALS (L) CASHEW FLOUR"/CV OR "BERTHOLETTIA EXCELSA"/CV OR "BRAZIL NUT"/CV OR "BRAZIL NUT (BERTHOLLETTIA EXCELSA)"/CV OR "BRAZIL NUTS"/CV OR BRAZIL-NUTS/CV OR "CARYA ILLINOINENSIS"/CV OR CASHEW/CV OR "CASHEW (ANACARDIUM OCCIDENTALE)"/CV OR JUGLANS/CV OR BUTTERNUT/CV OR "JUGLANS AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA AILANTHIFOLIA)"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA CORDIFORMIS)"/CV OR "WALNUT (L) J. AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) J. AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "JUGLANS AUSTRALIS"/CV OR "JUGLANS BOLIVIANA"/CV OR "JUGLANS CALIFORNICA"/CV OR "JUGLANS CATHAYENSIS"/CV OR "JUGLANS CINEREA"/CV OR "JUGLANS GUATEMALENSIS")

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L20 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19  
 L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L) L19  
 L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21

=> d ibib abs hitstr l22 1-25

L22 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:141200 HCAPLUS

DOCUMENT NUMBER: 142:254568

TITLE: Methods and compositions for increasing the efficacy  
 of biologically-active ingredients such as antitumor  
 agents

INVENTOR(S): Windsor, J. Brian; Roux, Stan J.; Lloyd, Alan M.;  
 Thomas, Collin E.

PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA

SOURCE: PCT Int. Appl., 243 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005014777	A2	20050217	WO 2003-US32667	20031016
WO 2005014777	A3	20050915		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2502148	AA	20050217	CA 2003-2502148	20031016
EP 1576150	A2	20050921	EP 2003-816736	20031016
EP 1576150	A3	20051102		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			

PRIORITY APPLN. INFO.: US 2002-418803P P 20021016  
 WO 2003-US32667 W 20031016

AB The invention provides methods and compns. for modulating the sensitivity of cells to cytotoxic compds. and other active agents. In accordance with the invention, compns. are provided comprising combinations of ectophosphatase inhibitors and active agents. Active agents include antibiotics, fungicides, herbicides, insecticides, chemotherapeutic

agents, and plant growth regulators. By increasing the efficacy of active agents, the invention allows use of compns. with lowered concns. of active ingredients.

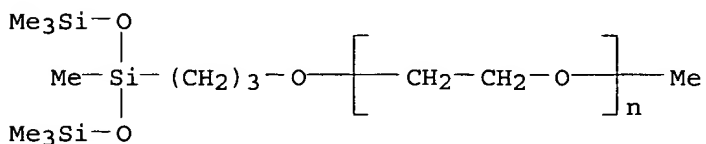
IT 27306-78-1 67674-67-3 125997-17-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods and compns. for increasing efficacy of biol.-active ingredients such as antitumor agents)

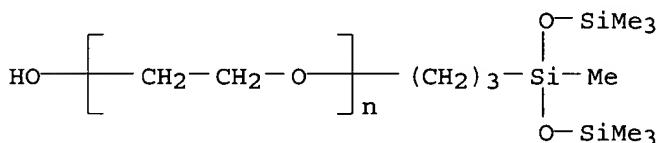
RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



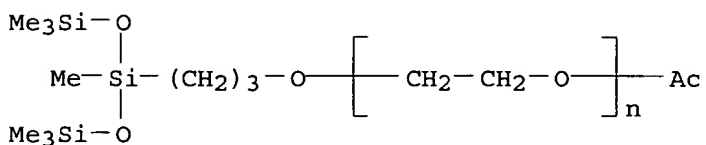
RN 67674-67-3 HCAPLUS

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RN 125997-17-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -acetyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



L22 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:19744 HCAPLUS

DOCUMENT NUMBER: 140:99272

TITLE: Detergent cosmetic compositions containing surfactants and a polysaccharide

INVENTOR(S): Lazzeri, Pascale; Apvrille, Alice

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Fr. Demande, 44 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2841776	A1	20040109	FR 2002-8553	20020708
FR 2841776	B1	20051223		
EP 1380284	A1	20040114	EP 2003-291647	20030703
EP 1380284	B1	20050629		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
AT 298554	E	20050715	AT 2003-291647	20030703
JP 2004035563	A2	20040205	JP 2003-272010	20030708
US 2004077510	A1	20040422	US 2003-614092	20030708
US 2005101499	A9	20050512		
BR 2003002728	A	20050329	BR 2003-2728	20030708
JP 2006022120	A2	20060126	JP 2005-290697	20051004
PRIORITY APPLN. INFO.:			FR 2002-8553	A 20020708
			US 2002-407708P	P 20020904
			JP 2003-272010	A3 20030708

OTHER SOURCE(S): MARPAT 140:99272

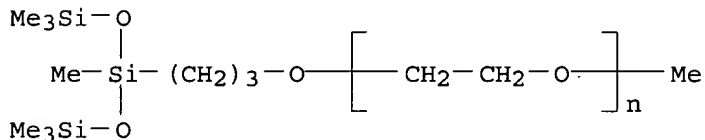
AB Detergent and conditioning cosmetic compns. contain anionic, amphoteric, nonionic, and or cationic surfactants and at least a polysaccharide chosen from the starch hydrolyzates. The composition can be used for hair formulations. Thus, a shampoo contained sodium lauryl ether sulfate 15.4, cocoyl betaine 2.4, polydimethyl siloxane 1.5, JR-400 2.5, cetyl alc./1-(hexyldecyloxy)-2-octadecanol mixture 2.5, coco monoisopropanolamide 1, Carbopol-980 0.2, perfume qs, N-oleoyldihydrosphingosine 0.01, and water qs to 100 g.

IT 27306-78-1, Silwet L 77

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(detergent cosmetic compns. containing surfactants and polysaccharide)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:969611 HCAPLUS

DOCUMENT NUMBER: 140:230913

TITLE: Enhancing the biological activity of nicosulfuron with silicone adjuvants and pH adjusters

AUTHOR(S): Green, Jerry M.; Cahill, William R.

CORPORATE SOURCE: Stine-Haskell Research Center, DuPont Crop Protection, Newark, DE, 19714-0030, USA

SOURCE: ASTM Special Technical Publication (2003), STP 1449 (Pesticide Formulations and Application Systems: 23rd Volume), 115-124

CODEN: ASTTA8; ISSN: 0066-0558

PUBLISHER: ASTM International

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Adjuvants that increased the pH of the spray solution and rapidly solubilized

nicosulfuron particles enhanced herbicidal activity with silicone adjuvants under specific conditions. These conditions included high nicosulfuron rates on difficult to control weeds, low spray vols., and initially acidic spray mixts. For example, all pH adjusters tested enhanced the activity of nicosulfuron in a spray volume of 140 L/ha with 0.1% weight/weight silicone surfactant blend on common cocklebur (*Xanthium strumarium* L.) and large crabgrass [*Digitaria sanguinalis* (L.) Scop.]. Generally, the most effective pH adjuster was tribasic potassium phosphate followed by triethanolamine. The high pH conditions rapidly dissolved the nicosulfuron particles and usually increased biol. activity. However, increasing pH did not always increase biol. activity. For example, the silicone-based surfactant and methylated seed oil blend was the most effective silicone adjuvant when applied as the only adjuvant, but the addition of sodium carbonate reduced its activity with on large crabgrass. A possible reason for this difference might be that the silicone surfactant and oil blend would be expected to enhance nicosulfuron uptake through both hydrophilic and lipophilic pathways into the leaf while the increased solubilization caused by the pH adjuster might only increase uptake through hydrophilic pathways. High pH conditions are known to increase silicone surfactant degradation and this could require users to spray silicone adjuvant and pH adjuster mixts. more rapidly than usual. These results generally support the concept that solubilization is necessary but not sufficient for foliarly applied herbicides to express maximum activity.

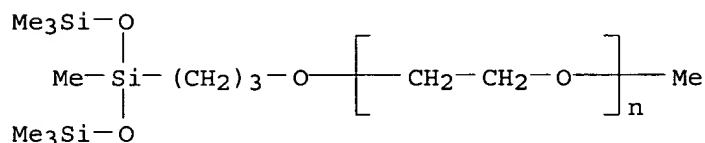
IT 27306-78-1, Silwet L-77

RL: MOA (Modifier or additive use); USES (Uses)

(enhancing herbicidal activity of nicosulfuron with silicone adjuvants and pH adjusters)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:370696 HCAPLUS

DOCUMENT NUMBER: 139:192817

TITLE: Effect of commercial adjuvants on vegetable crop fungicide coverage, absorption, and efficacy

AUTHOR(S): Gent, David H.; Schwartz, Howard F.; Nissen, Scott J.

CORPORATE SOURCE: Department of Bioagricultural Sciences & Pest Management, Colorado State University, Fort Collins, CO, 80523-1177, USA

SOURCE: Plant Disease (2003), 87(5), 591-597

CODEN: PLDIDE; ISSN: 0191-2917

PUBLISHER: American Phytopathological Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The addition of an appropriate adjuvant with foliar fungicide can significantly improve coverage, absorption, and efficacy. Laboratory and field studies evaluated coverage, absorption, and efficacy of com. adjuvants

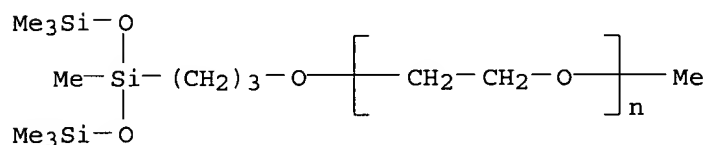
with diverse chemistries on multiple host-pathogen systems. Organosilicone-based adjuvants improved coverage by 26 to 38% compared with a latex spreader-sticker and water. Significant crop by coverage interaction effects were also detected. The organosilicone/methylated seed oil-based adjuvant, Aero Dyne-Amic, significantly improved total [14C]azoxystrobin absorption on onion and potato by 30 and 21%, resp., compared with water. The spreader-sticker, Bond, improved [14C]azoxystrobin absorption on onion and dry bean by 41 and 39%, resp., compared with water. In exptl. field plots, dry bean rust incidence was reduced by 52% when Kinetic or Latron AG-98 was added to maneb compared with maneb alone. The area under the potato early blight disease progress curve was reduced 29, 24, or 21% when Kinetic, Bond, or Latron AG-98 was added to maneb, resp., compared with maneb applications alone.

IT 27306-78-1, Silwet L-77

RL: AGR (Agricultural use); BSU (Biological study, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses) (effect of com. adjuvants on vegetable crop fungicide coverage, absorption, and efficacy)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:212762 HCAPLUS

DOCUMENT NUMBER: 139:63997

TITLE: Factors influencing successful Agrobacterium-mediated genetic transformation of wheat

AUTHOR(S): Wu, H.; Sparks, C.; Amoah, B.; Jones, H. D.

CORPORATE SOURCE: CPI Division, Harpenden, AL5 2JQ, UK

SOURCE: Plant Cell Reports (2003), 21(7), 659-668

CODEN: PCRPD8; ISSN: 0721-7714

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The development of a robust Agrobacterium-mediated transformation protocol for a recalcitrant species like bread wheat requires the identification and optimization of the factors affecting T-DNA delivery and plant regeneration. We have used immature embryos from range of wheat varieties and the Agrobacterium strain AGL1 harboring the pGreen-based plasmid pAL156, which contains a T-DNA incorporating the bar gene and a modified uidA ( $\beta$ -glucuronidase) gene, to investigate and optimize major T-DNA delivery and tissue culture variables. Factors that produced significant differences in T-DNA delivery and regeneration included embryo size, duration of pre-culture, inoculation and co-cultivation, and the presence of acetosyringone and Silwet-L77 in the media. We fully describe a protocol that allowed efficient T-DNA delivery and gave rise to 44 morphol. normal, and fully fertile, stable transgenic plants in two wheat varieties. The transformation frequency ranged from 0.3% to 3.3%. Marker-gene expression and mol. anal. demonstrated that transgenes were

integrated into the wheat genome and subsequently transmitted into progeny at Mendelian ratios.

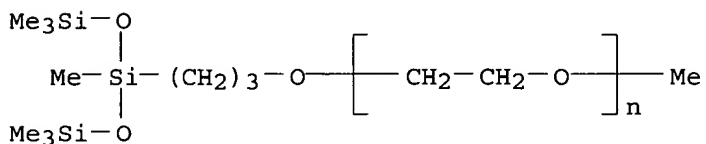
IT 27306-78-1, Silwet-L77

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(factors that produced significant differences in T-DNA delivery and regeneration included embryo size, and the presence of acetosyringone and Silwet-L77 in the media)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:58725 HCAPLUS

DOCUMENT NUMBER: 138:86708

TITLE: Methods and kits for detection of NPTII gene encoding neomycin phosphotransferase II and its use as selectable marker in transgenic plants

INVENTOR(S): Howe, Arlene R.; Feng, Paul C. C.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003017599	A1	20030123	US 2000-511826	20000224
US 6600088	B2	20030729		
US 2004093649	A1	20040513	US 2003-628804	20030728
PRIORITY APPLN. INFO.:			US 1999-121716P	P 19990226
			US 2000-511826	A1 20000224

AB Improved methods for the identification of transgenic plants containing NPTII gene encoding neomycin phosphotransferase II are disclosed. Application of organosilicone surfactant in combination with kanamycin and/or paromomycin facilitates the identification of plants containing NPTII protein. In a preferred embodiment the organosilicone surfactant is SILWET L-77 at a concentration of 0.001%-1.0% (volume/volume). The NPTII gene may be used as

a selectable marker in transgenic plants.

IT 27306-78-1, Silwetl77 67674-67-3, Silwet 408

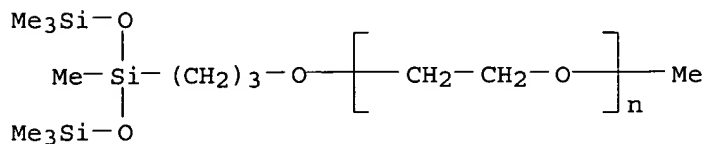
125997-17-3, Silwet Y-12808

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(plant growth and development assessed in presence of; methods and kits for detection of NPTII gene encoding neomycin phosphotransferase II and its use as selectable marker in transgenic plants)

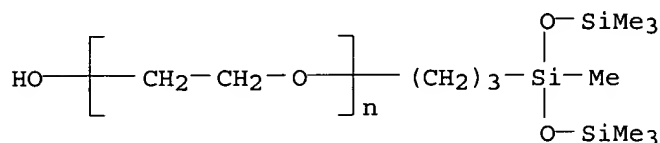
RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



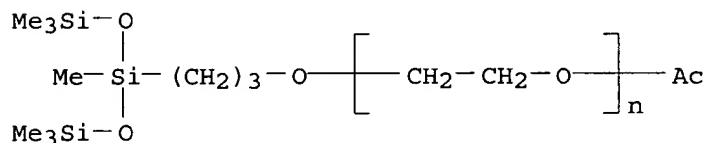
RN 67674-67-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



RN 125997-17-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -acetyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



L22 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:163861 HCAPLUS

DOCUMENT NUMBER: 136:195313

TITLE: Method for transforming plants using Agrobacterium

INVENTOR(S): Kloti, Andreas S.; Mulpuri, Rao

PATENT ASSIGNEE(S): Paradigm Genetics, Inc., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6353155	B1	20020305	US 2000-607306	20000630
PRIORITY APPLN. INFO.:			US 2000-607306	20000630

AB An improved, simplified method for preparing transgenic plants and **seeds** using Agrobacterium is claimed. The method is particularly useful for high-throughput transformation of plants, such as Arabidopsis thaliana, using many different types of DNA sequences of interest.

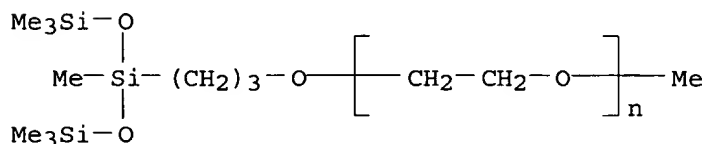
IT 27306-78-1, Silwet L-77

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)

(method for transforming plants using Agrobacterium)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:89768 HCAPLUS

DOCUMENT NUMBER: 136:130224

TITLE: Herbicide compositions containing sulfonamides, silicone surfactants and humectants

INVENTOR(S): Bickers, Udo; Bieringer, Hermann; Frisch, Gerhard; Hacker, Erwin; Huff, Hans Philipp

PATENT ASSIGNEE(S): Aventis CropScience GmbH, Germany

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002007515	A1	20020131	WO 2001-EP8125	20010713
W: AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN, YU, ZA				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10036003	A1	20020214	DE 2000-10036003	20000725
CA 2417090	AA	20030124	CA 2001-2417090	20010713
EP 1313367	A1	20030528	EP 2001-957965	20010713
EP 1313367	B1	20051109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012689	A	20030624	BR 2001-12689	20010713
JP 2004504331	T2	20040212	JP 2002-513270	20010713
AT 308883	E	20051115	AT 2001-957965	20010713
US 2002072474	A1	20020613	US 2001-911032	20010723
US 6573217	B2	20030603		
ZA 2003000195	A	20031120	ZA 2003-195	20030108
PRIORITY APPLN. INFO.:			DE 2000-10036003	A 20000725
			WO 2001-EP8125	W 20010713

AB The invention relates to a herbicide containing the following: (a) one or more herbicidal active agent from the group of grass-active sulfonamides; (b) one or more silicone surfactant; and (c) one or more humectant. The inventive herbicide compns. are effective for controlling various weeds.

Thus an aqueous spray was prepared that contained g active ingredient/ha:  
mesosulfuron 60; Silwet L77 50; sodium lactate 150.

IT 393056-63-8

RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL  
(Biological study); USES (Uses)

(herbicide compns. containing sulfonamides, silicone surfactants and  
humectants)

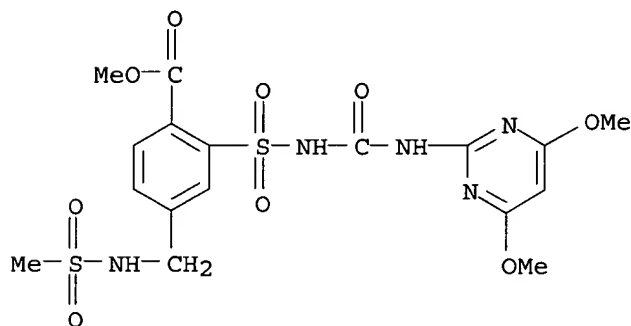
RN 393056-63-8 HCAPLUS

CN Benzoic acid, 2-[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulf  
onyl]-4-[[[(methylsulfonyl)amino]methyl]-, methyl ester, mixt. with  
2-hydroxypropanoic acid monosodium salt and  $\alpha$ -methyl- $\omega$ -[3-  
[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]poly(oxy-  
1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 208465-21-8

CMF C17 H21 N5 O9 S2

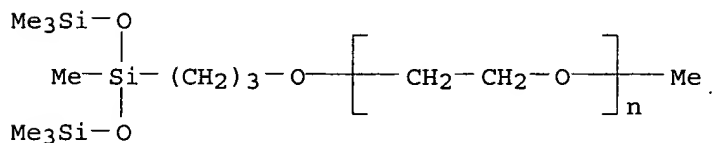


CM 2

CRN 27306-78-1

CMF (C2 H4 O)<sub>n</sub> C11 H30 O3 Si3

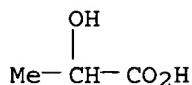
CCI PMS



CM 3

CRN 72-17-3

CMF C3 H6 O3 . Na



● Na

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:54301 HCAPLUS

DOCUMENT NUMBER: 136:212255

TITLE: Postemergence weed control with rimsulfuron and various adjuvants in potato (*Solanum tuberosum*)

AUTHOR(S): Tonks, Dennis J.; Eberlein, Charlotte V.

CORPORATE SOURCE: Department of Plant, Soil, and Entomological Sciences, University of Idaho, Aberdeen, ID, 83210, USA

SOURCE: Weed Technology (2001), 15(4), 613-616

CODEN: WETEE9; ISSN: 0890-037X

PUBLISHER: Weed Science Society of America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Field studies assessed weed control and potato injury with rimsulfuron applied postemergence at various rates in combination with various adjuvants. Weed control was influenced by choice of adjuvant and rimsulfuron rate. Rimsulfuron at 0, 9, 18, 26, and 35 g ai/ha was applied with nonionic surfactant (NIS), crop oil concentrate (COC), methylated seed oil (MSO), or silicone-polyether copolymer (SIL). Potato injury was less than 5% for all rimsulfuron rates and adjuvant combinations. Redroot pigweed was controlled greater than or equal to 93% by all treatments except rimsulfuron at 9 g/ha + SIL. Except for redroot pigweed, rimsulfuron treatments with SIL controlled kochia, hairy nightshade, common lambsquarters, and volunteer oats less than with other adjuvants. At lower rimsulfuron rates, weed control with rimsulfuron + MSO tended to be greater than with rimsulfuron + NIS or rimsulfuron + COC. Common lambsquarters control was 75% or less regardless of rimsulfuron rate or adjuvant. Tuber yield generally increased with increasing rimsulfuron rates. Depending on rimsulfuron rate, tuber yield was 10 to 15% lower with rimsulfuron + NIS or rimsulfuron + COC compared to rimsulfuron + MSO, while tuber yield was 18 to 37% lower with rimsulfuron + SIL compared to rimsulfuron + NIS, rimsulfuron + COC, or rimsulfuron + MSO.

IT 27306-78-1, Silwet 1-77

RL: BSU (Biological study, unclassified); MOA (Modifier or additive use);

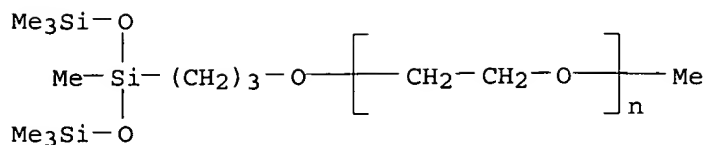
BIOL (Biological study); USES (Uses)

(postemergence weed control with rimsulfuron and various adjuvants in potato)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)





REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:870005 HCAPLUS

DOCUMENT NUMBER: 136:49332

TITLE: Agrobacterium-mediated plant flower bud transformation

INVENTOR(S): Pont, Lezica Rafael Fernando; Galaud, Jean Philippe; Carriere, Marguerite

PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique CNRS, Fr.

SOURCE: Fr. Demande, 16 pp.

CODEN: FRXXBL

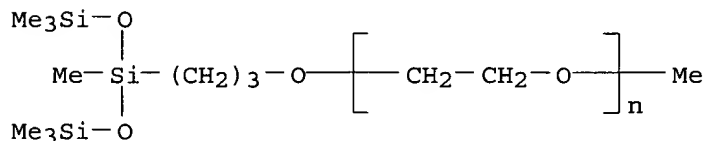
DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2805825	A1	20010907	FR 2000-2759	20000303
PRIORITY APPLN. INFO.:			FR 2000-2759	20000303
AB The invention relates to new method of plant transformation mediated by Agrobacterium. The suspension of Agrobacterium vector carrying the gene of interest is puerized on the flower buds of dicot, monocot, or gymnosperm plants.				
IT 27306-78-1, SILWET L77				
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)				
(Agrobacterium-mediated plant transformation)				
RN 27306-78-1 HCAPLUS				
CN Poly(oxy-1,2-ethanediyl), $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)				



L22 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:785216 HCAPLUS

DOCUMENT NUMBER: 136:16652

TITLE: Leafy spurge (Euphorbia esula) control and herbage production with imazapic

AUTHOR(S): Markle, Denise M.; Lym, Rodney G.

CORPORATE SOURCE: Plant Sciences Department, North Dakota State University, Fargo, ND, 58105, USA

SOURCE: Weed Technology (2001), 15(3), 474-480

CODEN: WETEE9; ISSN: 0890-037X  
 PUBLISHER: Weed Science Society of America  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

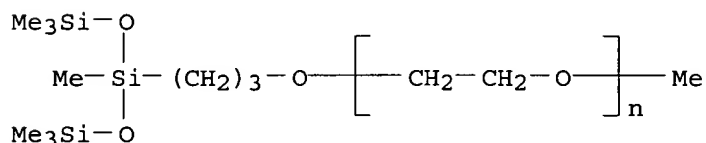
AB Greenhouse and field expts. were conducted in North Dakota to determine the effect of adjuvants applied with imazapic on the control of leafy spurge and production of various grass species and to determine the most effective fall-application timing of imazapic for optimum leafy spurge control with minimal effect on herbage. Imazapic applied with a methylated seed oil (MSO) adjuvant tended to provide greater leafy spurge control than when applied with other types of adjuvants. Imazapic applied alone or with adjuvants reduced production of some grass species in the greenhouse, but it did not decrease herbage production in the field. Imazapic at 140 g/ha applied with MSO or with 28% N plus MSO averaged 72% leafy spurge control 12 mo after treatment, compared to 33% control from imazapic alone and 40% control from picloram plus 2,4-D. Imazapic at 140 g/ha applied with MSO in mid-Sept. provided greater leafy spurge control compared to August or Oct. applications.

IT 27306-78-1, Silwet-L-77

RL: MOA (Modifier or additive use); USES (Uses)  
 (leafy spurge control and herbage production with imazapic, adjuvants effect on)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:555384 HCAPLUS

DOCUMENT NUMBER: 135:148564

TITLE: Influence of organosilicone adjuvants on the activity of tested herbicides

AUTHOR(S): Ziminska, Zofia; Turows-Biernacka, Maria

CORPORATE SOURCE: Inst. Przemysłu Organicznego, Warsaw, Pol.

SOURCE: Organika (2001), Volume Date 1999-2000 179-186

CODEN: ORGAD2; ISSN: 0137-9933

PUBLISHER: Instytut Przemysłu Organicznego

DOCUMENT TYPE: Journal

LANGUAGE: Polish

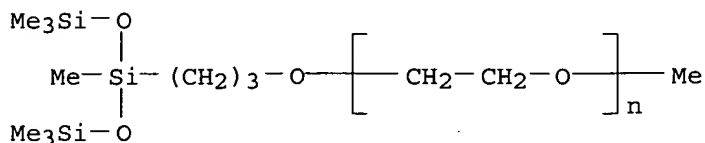
AB The influence of organosilicone adjuvants on the activity of some com. and exptl. herbicides has been tested. Two of organosilicone adjuvants were chosen: Silwet L 77 and Silwet 560. Adjuvants were added before spraying to spray fluids made from herbicides: Chwastox extra 300 SL, Tolkán 50 WP, Carfentrazone-Et 50 WP, Dicuran 80 WP, Aminopielik 600 SL, Lontrel 300 SL and IPO 14481 exptl. herbicide. The results obtained showed that Silwet L 77 was non-phytotoxic to oil seed rape and allowed to decrease the EDs of applied herbicide. Silwet 560 was non-phytotoxic to cereals and was effective when applied at concentration 0.5% of spray fluid of the herbicides tested.

IT 27306-78-1, Silwet L 77

RL: MOA (Modifier or additive use); USES (Uses)  
(influence of organosilicone adjuvants on activity of herbicides)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



L22 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:471733 HCAPLUS

DOCUMENT NUMBER: 136:145745

TITLE: Germ-line transformation of *Arabidopsis lasiocarpa*

AUTHOR(S): Tague, Brian W.

CORPORATE SOURCE: Department of Biology, Wake Forest University,  
Winston-Salem, NC, 27109, USA

SOURCE: Transgenic Research (2001), 10(3), 259-267

CODEN: TRSEES; ISSN: 0962-8819

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In planta transformation methods have opened up the possibility of transforming plant species for which no regeneration protocols currently exist. In this study, the suitability of the germ-line transformation method developed for *Arabidopsis thaliana* was examined for four taxa in the Brassicaceae that have not been previously transformed: *Arabidopsis griffithiana*, *Arabidopsis lasiocarpa*, *Arabidopsis petraea* and *Capsella bursa-pastoris*. Numerous transformants were obtained for *A. lasiocarpa*. Transformation of *A. lasiocarpa* was confirmed at the phenotypic and mol. levels for stably transformed lines and for backcrossed lines segregating the T-DNA insert. Parameters affecting transformation efficiency of *A. lasiocarpa* were also explored. As with *A. thaliana*, sucrose and surfactant in the inoculation medium are required for high levels of transformation, although the suitable concns. of these are different for *A. lasiocarpa*. Other components present in earlier versions of the inoculation medium had little effect on transformation efficiency. Vacuum infiltration (rather than simple floral dipping) led to higher rates of transformation and did not seriously affect seed production in *A. lasiocarpa*. Identification of species susceptible to germ-line transformation will aid in determining the factors important for applying this technol. to more recalcitrant species.

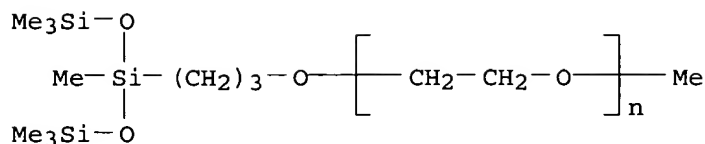
IT 27306-78-1, Silwet L 77

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(*Agrobacterium tumefaciens* mediated germ-line transformation of *Arabidopsis lasiocarpa*)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:57597 HCAPLUS

DOCUMENT NUMBER: 134:189402

TITLE: Optimizing foliar activity of glyphosate on *Bidens frondosa* and *Panicum maximum* with different adjuvant types

AUTHOR(S): Sharma, S. D.; Singh, M.

CORPORATE SOURCE: Citrus Research and Education Center, University of Florida, Lake Alfred, FL, 33850-2299, USA

SOURCE: Weed Research (2000), 40(6), 523-533

CODEN: WEREAT; ISSN: 0043-1737

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The influence of non-ionic (Ortho X-77) and organosilicone (Silwet L-77) adjuvants and of methylated seed oil (MSO) on the uptake, translocation and efficacy of glyphosate was investigated in *Bidens frondosa* L. and *Panicum maximum* Jacq. In addition, the physicochem. properties of adjuvants and adjuvant + glyphosate aqueous solns. were determined. Significantly lower surface tension and contact angle values were obtained with aqueous solns. of L-77 alone and with glyphosate. Over a 48-h time course, it was observed that > 50% of applied <sup>14</sup>C-glyphosate was absorbed within 15 min in *B. frondosa* with L-77. At 6 h and thereafter, <sup>14</sup>C-glyphosate absorption was significantly higher with MSO compared with X-77 in *B. frondosa*. In *P. maximum*, uptake and translocation of <sup>14</sup>C-glyphosate + adjuvant were increased in general up to 48 h after treatment application, except with L-77, which showed no improvement in uptake - instead there was a significant reduction compared with no treatment with L-77. This indicated its antagonistic effect on this grass species. The lower values of <sup>14</sup>C-glyphosate in *P. maximum* also confirmed that adjuvant effects were species specific. In the efficacy studies, glyphosate formulated with L-77 achieved significantly higher control of *B. frondosa*, while there was no control of *P. maximum* with this treatment. This confirmed antagonism in glyphosate absorption into *P. maximum* by L-77. Furthermore, significantly higher control of tested plants was recorded with MSO in comparison to X-77, which confirms the solubilizing or humectant nature of MSO.

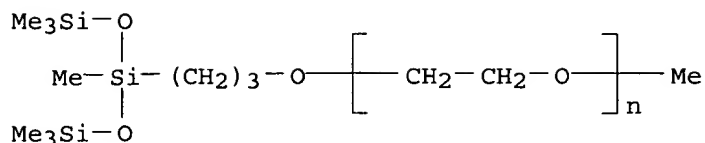
IT 27306-78-1, Silwet L-77

RL: MOA (Modifier or additive use); USES (Uses)

(effects on glyphosate uptake, translocation and efficacy in *Bidens* and *Panicum*)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:728146 HCAPLUS

DOCUMENT NUMBER: 133:318517

TITLE: Insecticidal activity of surfactants and oils against silverleaf whitefly (*Bemisia argentifolii*) nymphs (Homoptera: Aleyrodidae) on collards and tomato

AUTHOR(S): Liu, Tong-Xian; Stansly, Philip A.

CORPORATE SOURCE: Vegetable IPM Laboratory, Texas A&M University, Texas Agricultural Experiment Station, Weslaco, TX, 78596-8399, USA

SOURCE: Pest Management Science (2000), 56(10), 861-866

CODEN: PMSFCF; ISSN: 1526-498X

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The insecticidal activities of four surfactants (Cide-kick, Silwet L-77, M-Pede and APSA-80), a dishwashing detergent (New Day), a mineral oil (Sunspray oil), a cottonseed oil and a vegetable oil, alone or in combination, were tested against nymphs of *Bemisia argentifolii* on collards and tomato. Silwet L-77 was more effective (>95% mortality) than Cide-Kick or APSA-80 at rates from 0.25-1.00 g L-1, but caused severe phytotoxicity to tender tomato leaves at all but the lowest rate. New Day dish detergent at 2.0 mL L-1 caused mortality (95%) comparable to M-Pede insecticide soap at 10-fold greater concentration. A New Day ingredient, cocamide

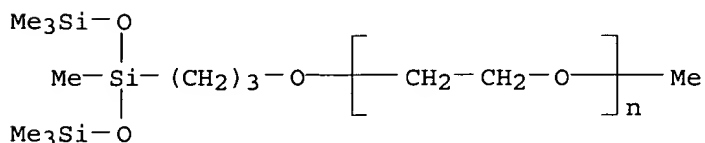
DEA, was considerably more active than the other ingredients or the com. mixture. Addnl. surfactants added to Sunspray oil increased efficacy in some treatments, but not others. Toxic responses of 2nd- and 3rd- instar whiteflies to vegetable oil and cotton seed oil at 5.0 and 10.0 mL L-1 plus 0.4 g litre-1 APSA-80 ranged from 22.1 to 79.9% and 66.3-88.7% mortality, resp. Whitefly mortality was greater on tomato than on collard in 6 of 7 instances when differences between host plants were significant. The surfactants and oils have good potential for controlling *B. argentifolii*.

IT 27306-78-1, Silwet L-77

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (insecticidal activity against *Bemisia argentifolii* nymphs on collards and tomato)

RN 27306-78-1 HCAPLUS

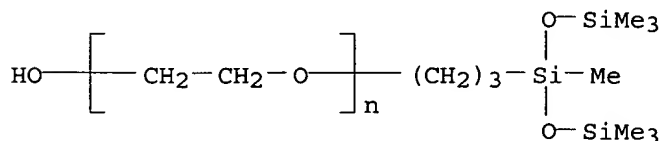
CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:534937 HCAPLUS  
DOCUMENT NUMBER: 133:131180  
TITLE: A method to thin flowers and fruit  
INVENTOR(S): Rosenberg, David; Levanon, Ilan; Klein, Joshua D.;  
Frankel, Meir  
PATENT ASSIGNEE(S): Agan Chemical Manufacturers Ltd., Israel  
SOURCE: PCT Int. Appl., 19 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
✓	WO 2000044229	A1	20000803	WO 2000-IL62	20000130
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	PRIORITY APPLN. INFO.:			IL 1999-128305	A 19990201
AB	There is provided a method for the thinning of flowers and fruit, by applying Silwet-408. The invention results in the thinning of a large variety of fruit and in the case of "Orlah" fruit, the almost total removal of fruit from the plant.				
IT	67674-67-3, Silwet-408. RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (thinning agent for flowers and fruit)				
RN	67674-67-3 HCAPLUS				
CN	Poly(oxy-1,2-ethanediyl), $\alpha$ -[3-[1,3,3,3-tetramethyl-1- [(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)				



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2000:261253 HCAPLUS  
DOCUMENT NUMBER: 133:13660  
TITLE: Influence of adjuvants on itchgrass (*Rottboellia  
cochinchinensis*) control in corn (*Zea mays*) with  
nicosulfuron and primisulfuron

AUTHOR(S): Strahan, Ronald E.; Griffin, James L.; Jordan, David L.; Miller, Donnie K.

CORPORATE SOURCE: Louisiana Cooperative Extension Service, Baton Rouge, LA, 70803, USA

SOURCE: Weed Technology (2000), 14(1), 66-71  
CODEN: WETEE9; ISSN: 0890-037X

PUBLISHER: Weed Science Society of America

DOCUMENT TYPE: Journal

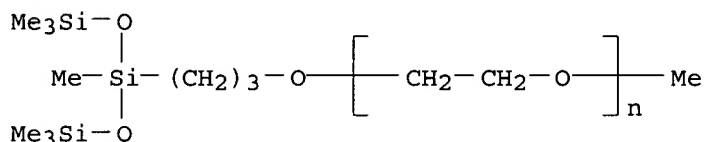
LANGUAGE: English

AB In field expts., nicosulfuron, at 35 g/ha, controlled itchgrass in corn 28 days after treatment better than primisulfuron, at 39 g/ha (80 vs. 44%). Control with both herbicides was greater when applied to six-leaf itchgrass than to 10-leaf and with the addition of nonionic surfactant than with an organosilicon surfactant and methylated **seed** oil blend. Weed control for nicosulfuron plus nonionic surfactant resulted in corn yield approx. 1.5 times that of primisulfuron plus nonionic surfactant and 1.6 times that of nicosulfuron plus an organosilicon surfactant and methylated **seed** oil blend. When primisulfuron was applied with organosilicon surfactant and methylated **seed** oil rather than nonionic surfactant, corn yield was reduced by 25%. For nicosulfuron with nonionic surfactant, corn yield averaged approx. twice that of the nontreated check. In other field expts., itchgrass control 28 days after treatment with nicosulfuron was enhanced with addition of an organosilicon and nonionic surfactant blend or methylated **seed** oil (83 and 78%, resp.) compared with nonionic surfactant (69%). Nicosulfuron was less effective when applied with crop oil concentrate or organosilicon surfactants, compared with nonionic surfactant.

IT 27306-78-1, Silwet L-77  
RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(effect of adjuvants on *Rottboellia cochinchinensis* control in corn with nicosulfuron and primisulfuron)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:102971 HCAPLUS

DOCUMENT NUMBER: 130:248275

TITLE: Johnson grass (*Sorghum halepense*) control and rainfastness with glyphosate and adjuvants

AUTHOR(S): Miller, Donnie K.; Griffin, James L.; Richard, Edward P., Jr.

CORPORATE SOURCE: Northeast Research Station, Louisiana State University Agricultural Center, St. Joseph, LA, 71366, USA

SOURCE: Weed Technology (1998), 12(4), 617-622  
CODEN: WETEE9; ISSN: 0890-037X

PUBLISHER: Weed Science Society of America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Glyphosate and adjuvant combinations were applied to rhizome Johnson grass at vegetative and reproductive growth stages to evaluate control and rainfastness in field studies. Using a rainfall simulator delivering 1.3 cm of water in 15 min, plots received either no rainfall or rainfall 15 or 60 min after glyphosate was applied at 2.1 kg/ha in combination with the nonionic surfactants Kinetic HV at 0.25% (volume/volume) or Induce at 1.0% (volume/volume) or the silicone surfactant Break-Thru at 0.125% (volume/volume).

Regardless of adjuvant, rainfall 15 or 60 min after application reduced Johnson grass control compared with no rainfall. Johnson grass control 14 days after treatment at the reproductive stage was at least 89% with no rainfall, but no more than 53 and 65% with rainfall at 15 and 60 min, resp. Based on initial weed control, adjuvants did not consistently improve rainfastness. Johnson grass regrowth did not occur when glyphosate was applied with either adjuvant. In contrast, for glyphosate applied to Johnson grass in the vegetative stage, addition of Break-Thru improved control over Induce, at both 15- and 60-min rainfall timings in one of two expts. With no rainfall, addition of Kinetic HV and Break-Thru increased Johnson grass control in only one experiment. For application at the vegetative stage, Johnson grass regrowth averaged across rainfall timings was no more than 10%. In other field expts., glyphosate at 1.4 kg/ha plus nonionic surfactants, silicone surfactant, crop oil concentrate, methylated seed oil, or a blend of silicone surfactant and methylated seed oil were equally effective in reducing Johnson grass regrowth when applied after seed head emergence. Improved control of vegetative johnson grass with some adjuvants was not reflected in decreased regrowth.

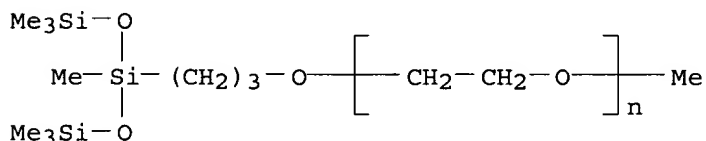
IT 27306-78-1, Silwet L-77 67674-67-3, Silwet 408

RL: MOA (Modifier or additive use); USES (Uses)

(Sorghum halepense control and rainfastness with glyphosate and adjuvants)

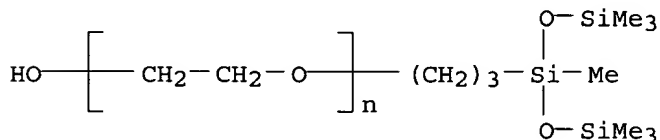
RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



RN 67674-67-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

24

THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L22 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1998:790532 HCAPLUS  
 DOCUMENT NUMBER: 130:82013  
 TITLE: Manufacture of spacers for liquid crystal display elements  
 INVENTOR(S): Takahashi, Toru; Minamino, Hiroko; Nagai, Yasuhiko  
 PATENT ASSIGNEE(S): Sekisui Fine Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10324706	A2	19981208	JP 1997-133826	19970523
PRIORITY APPLN. INFO.:			JP 1997-73797	A 19970326

AB Spacers for liquid crystal display elements are manufactured by dispersing **seed** particles in a reaction medium, dissolving a radical polymerization initiator in the reaction medium, and polymerizing radical polymerizable monomer CH<sub>2</sub>:C(R<sub>1</sub>)CO<sub>2</sub>R<sub>2</sub> and/or CH<sub>2</sub>:C(R<sub>1</sub>)CO(OC<sub>2</sub>H<sub>4</sub>)mOR<sub>3</sub> [R<sub>1</sub> = H, Me; R<sub>2</sub> = C<sub>6</sub>-30 alkyl; R<sub>3</sub> = Me, (meth)acryl; m = 4-40] to form a polymer layer around a **seed** particle, where the reaction medium dissolves the monomers but not the polymers.

IT **218460-10-7P**  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (spacer; manufacture of spacers for liquid crystal display elements)

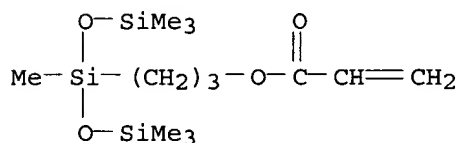
RN 218460-10-7 HCAPLUS

CN 2-Propenoic acid, 3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxany 1]propyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 177617-17-3

CMF C13 H30 O4 Si3



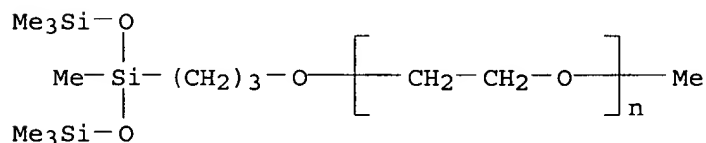
L22 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:685949 HCAPLUS  
 DOCUMENT NUMBER: 127:304289  
 TITLE: Control of pecan aphids with an organosilicone surfactant  
 AUTHOR(S): Wood, Bruce W.; Tedders, W. Louis; Taylor, James  
 CORPORATE SOURCE: USDA-ARS, Southeastern Fruit and Tree Nut Research Laboratory, Byron, GA, 31008, USA  
 SOURCE: HortScience (1997), 32(6), 1074-1076  
 CODEN: HJHSAR; ISSN: 0018-5345  
 PUBLISHER: American Society for Horticultural Science  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Aphids cause major annual economic losses to the U.S. pecan [*Carya illinoensis* (Wangenh.) K. Koch] industry and are becoming harder to control with standard pesticides. An evaluation of efforts by certain growers to suppress aphid populations using air-blast sprays of 0.05% Silwet L-77, a non-ionic super-wetting organosilicone surfactant, indicated that: 1) redns. in blackmargined aphid [*Monellia caryella* (Fitch)] levels were mostly attributable to the air-blast spray effect rather than to the Silwet L-77 component; 2) a 0.05% solution of Silwet L-77 reduced net photosynthesis (A) of foliage by 5% for at least 14 days post-treatment; and 3) the efficacy of 0.05% Silwet L-77 sprays is not substantially increased by doubling the volume of spray per tree (1868 L·ha<sup>-1</sup>). However, higher Silwet L-77 concns. were highly effective in killing aphids, although there was little or no residual activity. A response curve indicated that air-blast sprays of orchard trees with 0.30% (volume/volume) Silwet L-77 (at 934 L·ha<sup>-1</sup>) are capable of reducing yellow pecan aphid (*Monelliopsis pecanis* Bissell) populations by at least 84% while only reducing A by ≤10%.

IT 27306-78-1, Silwet L-77  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (control of pecan aphids with organosilicone surfactant)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-methyl-ω-[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:337722 HCAPLUS

DOCUMENT NUMBER: 126:316593

TITLE: Effect of surfactants on pressure infiltration of calcium chloride solutions into "Golden Delicious" apples

AUTHOR(S): Saftner, Robert A.; Buta, J. George; Conway, William S.; Sams, Carl E.

CORPORATE SOURCE: Horticultural Crops Quality Laboratory, Beltsville Agricultural Research Center, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, MD, 20705, USA

SOURCE: Journal of the American Society for Horticultural Science (1997), 122(3), 386-391  
 CODEN: JOSHB5; ISSN: 0003-1062

PUBLISHER: American Society for Horticultural Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effects of 36 organosilicon and conventional carbon-based surfactants on postharvest infiltration of radiolabeled and unlabeled Ca solns. into "Golden Delicious" apples (*Malus domestica* Borkh) were examined to devise a more efficient pressure infiltration technique to increase fruit Ca concentration  
 Radiolabeled Ca infiltration and the proportional increase in fruit Ca

estimated by fruit weight gain from Ca solns. of known concentration were significantly

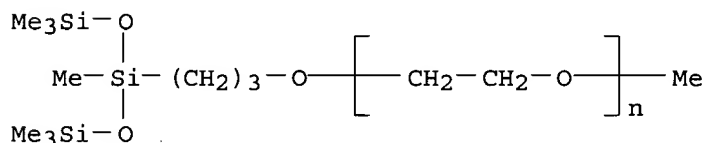
enhanced by a range of surfactants having different chemical structures. Tween 60 and 80; Triton X-45, X-100, X-114, X-305, and X-405; and Silwet L-77 and L-7604 enhanced Ca infiltration. The two organosilicon surfactants, Silwet L-77 and Silwet L-7604, known for their greater capacity to lower the surface tension of solns. than conventional carbon-based surfactants, were the most effective at augmenting Ca infiltration. Applications of surfactants to fruit were as or more effective when used as a pretreatment rather than mixing the surfactant with the Ca solns. The pressure necessary to increase Ca to levels considered sufficient to maintain fruit firmness and resist decay during storage could be lowered in fruit treated with organosilicon surfactants. Sequential postharvest surfactant and Ca treatments may be a practical means of increasing the Ca concentration in apples.

IT 27306-78-1, Silwet177

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(enhancement by surfactants of pressure infiltration of calcium chloride solns. into harvested apples)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:109143 HCAPLUS

DOCUMENT NUMBER: 126:128222

TITLE: Influence of adjuvants on efficacy of clethodim

AUTHOR(S): Jordan, David L.; Vidrine, P. Roy; Griffin, James L.; Reynolds, Daniel B.

CORPORATE SOURCE: Northeast Res, Stn., St. Joseph, LA, 71366, USA

SOURCE: Weed Technology (1996), 10(4), 738-743

CODEN: WETEE9; ISSN: 0890-037X

PUBLISHER: Weed Science Society of America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Field expts. evaluated barnyardgrass, broadleaf signalgrass, and rhizomatous johnson grass control with clethodim applied with Agri-Dex crop oil concentrate at 1.0% volume/volume, the adjuvant Dash at 1.0% volume/volume, the

methyated **seed** oil Sun-It II at 1.0% volume/volume, a blend of silicone surfactant plus methyated **seed** oil (Dyne-Amic at 0.5% volume/volume) or nonionic surfactant (Kinetic HV at 0.125% volume/volume), two silicone surfactants (Sylgard 309 and Silwet L-77 surfactant) at 0.125% volume/volume, two other conventional nonionic surfactants (Latron AG-98 and Induce) at 0.25% volume/volume, and the acidified soya phospholipid LI-700. When compared with the conventional nonionic or silicone-based surfactants and LI-700, clethodim at 70 g ai/ha controlled barnyardgrass more effectively when applied with Dash or Sun-It II. Broadleaf signalgrass and rhizomatous johnson grass were controlled more effectively when

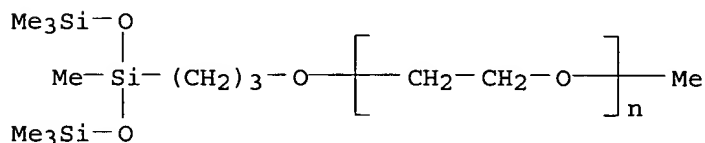
clethodim was applied with Agri-Dex, Dash, Sun-It II, or Dyne-Amic. Clethodim at 70 g/ha applied with Dash or Sun-It II controlled grasses equally or greater than clethodim at 140 g/ha.

IT 27306-78-1, Silwet L-77

RL: MOA (Modifier or additive use); USES (Uses)  
(effect of adjuvants on efficacy of clethodim)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:505111 HCAPLUS

DOCUMENT NUMBER: 125:161016

TITLE: Adjuvant effects on imazethapyr, 2,4-D and picloram absorption by leafy spurge (*Euphorbia esula*)

AUTHOR(S): Thompson, W. Mack; Nissen, Scott J.; Masters, Robert A.

CORPORATE SOURCE: Agric. Res. Div., Univ. Nebraska, Lincoln, NE, 68583-0915, USA

SOURCE: Weed Science (1996), 44(3), 469-475

CODEN: WEESA6; ISSN: 0043-1745

PUBLISHER: Weed Science Society of America

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Laboratory expts. were conducted to identify adjuvants that improve absorption of imazethapyr, 2,4-D amine, and picloram by leafy spurge. Adjuvants (0.25% volume/volume) included crop oil concentrate (COC), methylated seed oil (MSO), nonionic surfactant (NIS), organosilicones (Silwet L-77, Sylgard 309, Silwet 408), 3:1 mixts. of acetylinic diol ethoxylates (ADE40, ADE65, ADE85) with Silwet L-77, ammonium sulfate (2.5 kg ha<sup>-1</sup>), and 28% urea ammonium nitrate (UAN, 2.5% volume/volume). Adjuvants were combined with 14C-herbicide and com. formulated herbicide product. Leaves were harvested 2 DAT, rinsed with 10% aqueous methanol to remove surface deposits of herbicide, and dipped in 9:1 hexane:acetone to solubilize cuticular waxes. Imazethapyr absorption increased by 38 to 68% when UAN was combined with COC, NIS, or MSO. Total absorption of imazethapyr plus COC, MSO, or NIS exceeded 86% 2 DAT when UAN was added. Urea ammonium nitrate reduced the amount of imazethapyr associated with the cuticular wax by 2.0%. Imazethapyr absorption was similar on both the abaxial and adaxial leaf surface when UAN was not added; however, 12% more imazethapyr was absorbed from the abaxial leaf surface than from the adaxial leaf surface when UAN was combined with Sylgard 309. Uptake of 2,4-D ranged from 54 to 78% and was greatest with Silwet 408 and 3:1 mixture of ADE40:Silwet L-77. Picloram absorption ranged from 3 to 19%. Buffering picloram treatment solns. to pH 7 and including 2.5 kg ha<sup>-1</sup> ammonium sulfate increased picloram absorption to 37%.

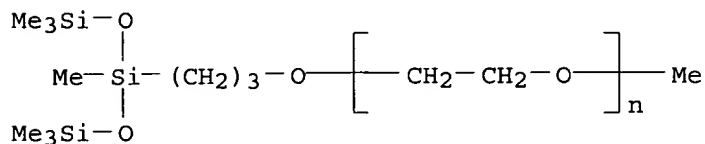
IT 27306-78-1, Silwet L 77 67674-67-3, Silwet 408

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIO (Biological study); USES (Uses)

(adjuvant effects on imazethapyr, 2,4-D and picloram absorption by leafy spurge)

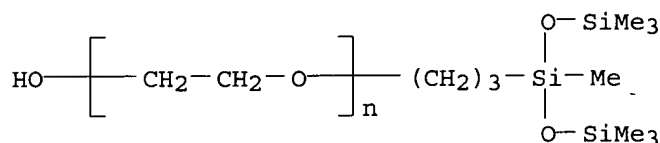
RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



RN 67674-67-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



L22 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:313531 HCAPLUS

DOCUMENT NUMBER: 125:22362

TITLE: Electrophotographic printing platemaking for providing high quality prints and printing plate original making apparatus

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 96 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08050380	A2	19960220	JP 1995-158751	19950602
PRIORITY APPLN. INFO.:			JP 1995-158751	A 19950602
			JP 1994-144084	19940603

AB The title platemaking comprises a process to form toner images on an electrophotog. plate, a process to form a peelable transfer layer comprised mainly of a specific resin capable of being developed by a chemical treatment on the toner images, a process to transfer the transfer layer together with the toner images from the electrophotog. plate to a primary receptor, a process to transfer the transfer layer together with the toner images from the primary receptor to a printing plate and a process to remove the transfer layer with the chemical treatment. The above specific resin comprises a resin with either a Tg of 30-140° or a softening point of 35-180° and a resin with either a Tg of  $\leq 40^\circ$  or a softening point of  $\leq 45^\circ$ .

IT 176895-95-7P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
 RACT (Reactant or reagent)  
 (preparation of resins for transfer layer)

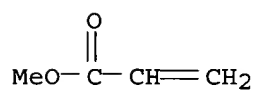
RN 176895-95-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 3-mercaptopropanoic acid telomer with 3-[1,3,3,3-tetramethyl-1-  
 [(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate  
 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, methyl 2-propenoate and  
 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96-33-3

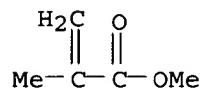
CMF C4 H6 O2



CM 2

CRN 80-62-6

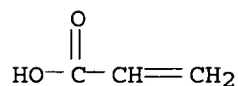
CMF C5 H8 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

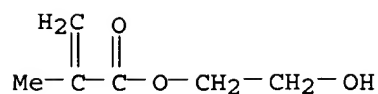
CRN 176895-94-6

CMF (C14 H32 O4 Si3)x . x C6 H10 O3 . C3 H6 O2 S

CM 5

CRN 868-77-9

CMF C6 H10 O3



CM 6

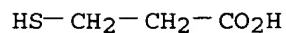
CRN 176762-57-5

CMF (C14 H32 O4 Si3)x . C3 H6 O2 S

CM 7

CRN 107-96-0

CMF C3 H6 O2 S



CM 8

CRN 176762-56-4

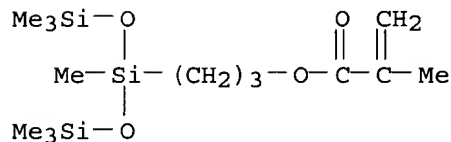
CMF (C14 H32 O4 Si3)x

CCI PMS

CM 9

CRN 19309-90-1

CMF C14 H32 O4 Si3



IT 176895-98-0P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)

(shell portion; preparation of resins for transfer layer)

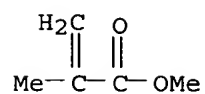
RN 176895-98-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
3-mercaptopropanoic acid telomer with 3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate  
2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, and 2-propenoic acid (9CI)  
(CA INDEX NAME)

CM 1

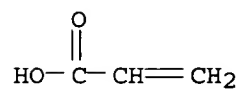
CRN 80-62-6

CMF C5 H8 O2



CM 2

CRN 79-10-7  
CMF C3 H4 O2

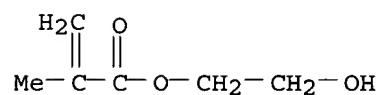


CM 3

CRN 176895-94-6  
CMF (C14 H32 O4 Si3)x . x C6 H10 O3 . C3 H6 O2 S

CM 4

CRN 868-77-9  
CMF C6 H10 O3

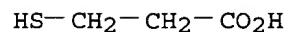


CM 5

CRN 176762-57-5  
CMF (C14 H32 O4 Si3)x . C3 H6 O2 S

CM 6

CRN 107-96-0  
CMF C3 H6 O2 S



CM 7

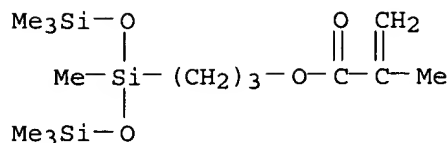
CRN 176762-56-4  
CMF (C14 H32 O4 Si3)x  
CCI PMS

CM 8

CRN 19309-90-1



CMF C14 H32 O4 Si3



L22 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:183211 HCAPLUS

DOCUMENT NUMBER: 96:183211

TITLE: Special polyoxyalkylene-siloxanes and their use

INVENTOR(S): Duffaut, Norbert

PATENT ASSIGNEE(S): Societe Anon. Exsymol, Monaco

SOURCE: Fr. Demande, 12 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2484425	A1	19811218	FR 1980-10041	19800506
FR 2484425	B1	19860516		

PRIORITY APPLN. INFO.: FR 1980-10041 A 19800506

AB Polyoxyalkylene-siloxanes which contain a polyoxyalkylene chain (mol.weight 174-880) bonded to  $\geq 1$  siloxane group and have 1.5-30.0 C (in the polyoxyalkylene chain)/Si atom are stable and solubility in water and are useful for extracting petroleum from rocks and shale, for extracting vegetable oils

from crushed **seeds**, as emulsifiers in cosmetics, etc. Thus, 100 mL water containing 0.5% MeSi(OH)2CH2CH2(OCH2CH2)7Si(OH)2Me [81585-25-3] extracted 3.7 g crude petroleum from 100 g gravel containing 7 g petroleum.

IT 81581-60-4

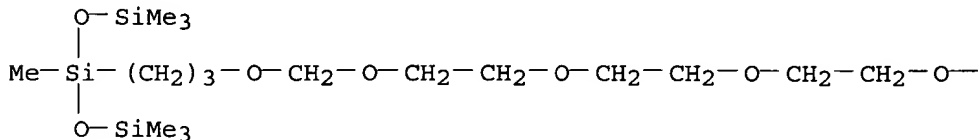
RL: USES (Uses)

(emulsifying agents, for hydrocarbons and triglycerides)

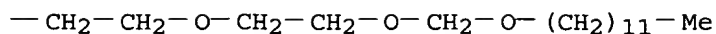
RN 81581-60-4 HCAPLUS

CN 3,8,10,13,16,19,22,25,27-Nonaoxa-2,4-disilanonatriacontane,  
2,2,4-trimethyl-4-[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)

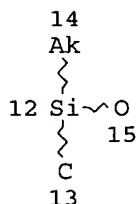
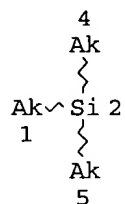
PAGE 1-A



PAGE 1-B



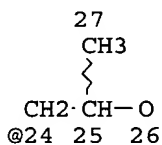
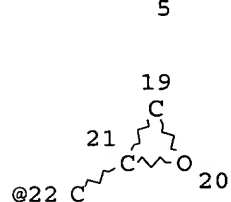
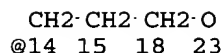
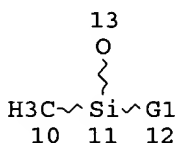
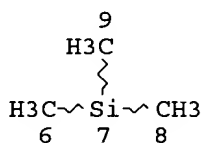
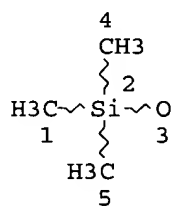
=> => d stat que  
L11 STR



NODE ATTRIBUTES:  
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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NUMBER OF NODES IS 8

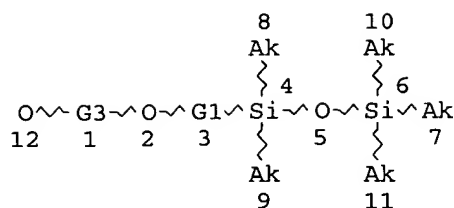
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L13 107479 SEA FILE=REGISTRY SSS FUL L11  
L14 STR



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DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 25

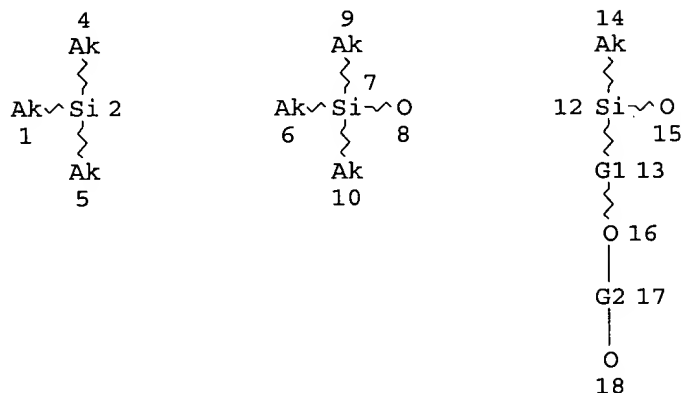
STEREO ATTRIBUTES: NONE  
L15 STR



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 REP G3=(2-4) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE  
 L16 STR



REP G1=(1-4) C  
 REP G2=(2-4) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 1715 SEA FILE=REGISTRY SUB=L13 SSS FUL L14 OR L15 OR L16  
 L18 1163 SEA FILE=HCAPLUS ABB=ON PLU=ON L17  
 L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR  
 "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR  
 COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS  
 (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV  
 OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR  
 "ALMOND (PRUNUS AMYGDALUS)"/CV OR ALMONDS/CV OR "ANACARDIUM  
 OCCIDENTALE"/CV OR "ANACARDIUM OCCIDENTALE NANUM"/CV OR  
 "CASHEW (ANACARDIUM OCCIDENTALE NANUM)"/CV OR "CASHEW (ANACARDI  
 UM OCCIDENTALE) (L) FLOUR"/CV OR "CASHEW (L) FLOUR"/CV OR

"FLOURS AND MEALS (L) CASHEW FLOUR"/CV OR "BERTHOLETTIA EXCELSA"/CV OR "BRAZIL NUT"/CV OR "BRAZIL NUT (BERTHOLLETTIA EXCELSA)"/CV OR "BRAZIL NUTS"/CV OR "BRAZIL-NUTS"/CV OR "CARYA ILLINOINENSIS"/CV OR "CASHEW"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE)"/CV OR "JUGLANS"/CV OR "BUTTERNUT"/CV OR "JUGLANS AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA AILANTHIFOLIA)"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA CORDIFORMIS)"/CV OR "WALNUT (L) J. AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) J. AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "JUGLANS AUSTRALIS"/CV OR "JUGLANS BOLIVIANA"/CV OR "JUGLANS CALIFORNICA"/CV OR "JUGLANS CATHAYENSIS"/CV OR "JUGLANS CINEREA"/CV OR "JUGLANS GUATEMALENSIS"/CV OR "JUGLANS HINDSII"/CV OR "JUGLANS MAJOR"/CV OR "JUGLANS MANDSHURICA"/CV OR "JUGLANS MICROCARPA"/CV OR "JUGLANS NEOTROPICA"/CV OR "JUGLANS NIGRA"/CV OR "JUGLANS OLANCHANA"/CV OR "JUGLANS REGIA"/CV OR "JUGLANS REGIA FALLAX"/CV OR "JUGLANS REGIA MEMBRANICA"/CV OR "JUGLANS REGIA ORIENTALIS"/CV OR "WALNUT (JUGLANS REGIA FALLAX)"/CV OR "WALNUT (JUGLANS REGIA MEMBRANICA)"/CV OR "WALNUT (JUGLANS REGIA ORIENTALIS)"/CV OR "WALNUT (L) J. REGIA ORIENTALIS"/CV OR "WALNUT (L) JUGLANS REGIA FALLAX"/CV OR "WALNUT (L) JUGLANS REGIA MEMBRANICA"/CV OR "WALNUT (L) JUGLANS REGIA ORIENTALIS"/CV OR "JUGLANS SIGILLATA"/CV OR "JUGLANS SINENSIS"/CV OR WAL

L20 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19  
 L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)L19  
 L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21  
 L23 105764 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT L17  
 L24 49001 SEA FILE=HCAPLUS ABB=ON PLU=ON L23  
 L25 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L24(L)L19  
 L26 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L21 OR L22)

=> d ibib abs hitstr l26 1-22

L26 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:732975 HCAPLUS

DOCUMENT NUMBER: 143:367940

TITLE: One-step seed dispersion polymerization in supercritical carbon dioxide

AUTHOR(S): Wang, Wenxin; Howdle, Steven M.; Yan, Deyue

CORPORATE SOURCE: School of Chemistry, University of Nottingham, Nottingham, UK

SOURCE: Chemical Communications (Cambridge, United Kingdom) (2005), (31), 3939-3941

CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A single step seed dispersion polymerization is reported for the first time, in which scCO<sub>2</sub> is used simultaneously as both an antisolvent and a polymerization medium to create polymer-C60 composite microparticles providing addnl. proof for the mechanism of dispersion polymerization in scCO<sub>2</sub>.

IT 123109-42-2

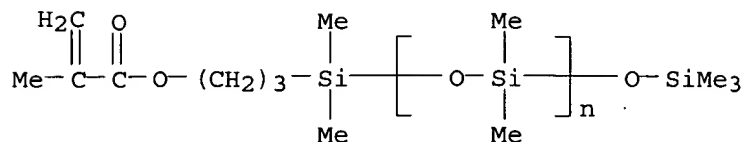
RL: NUU (Other use, unclassified); USES (Uses)

(stabilizer; one-step **seed** dispersion polymerization in supercrit. carbon dioxide)

RN 123109-42-2 HCAPLUS

CN Poly[oxy(dimethylsilylene)],  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-

propenyl)oxy]propyl)silyl]- $\omega$ -[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:390337 HCAPLUS

DOCUMENT NUMBER: 138:409318

TITLE: Electrophotographic liquid developer containing dispersion resin particles obtained by seed polymerization

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003149874	A2	20030521	JP 2001-350122	20011115
PRIORITY APPLN. INFO.:			JP 2001-350122	20011115

AB The liquid developer comprises resin particles dispersed in a nonaq. solvent having an elec. resistivity  $\geq 10^9 \Omega \cdot \text{cm}$  and a dielec. constant  $\leq 3.5$ . The resin particles are obtained by seed polymerization of (a)  $\geq 1$  type of monofunctional monomer (A) which is soluble in said solvent but becomes insol. upon polymerization, (b)  $\geq 1$  type of monofunctional monomer (MM) which is copolymerizable with (A), has a weight average mol. weight  $\leq 20,000$ , is represented by  $\text{m}_1\text{HC}=\text{Cm}_2-\text{J}_1-$  ( $\text{J}_1 = \text{COO}$ ,  $\text{OCO}$ , etc.; and  $\text{m}_1, \text{m}_2 = \text{H}$ , halo, cyano, etc.), and is terminated at only one end of the backbone chain with a F- and/or Si-containing substituent, (c)  $\geq 1$  type of dispersion stabilizing resin particles (P) dispersed in said solvent, and (d) a seed particle having an average grain diameter  $0.05-1.0 \mu\text{m}$ . The liquid developer made the development-fixing step faster in making a large size master plate.

IT **532395-04-3P**  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (electrophotog. liquid developer containing dispersion resin particles obtained by seed polymerization)

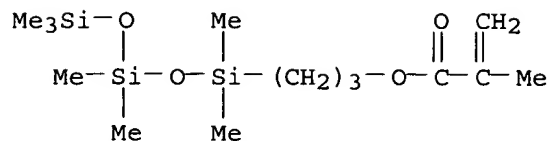
RN 532395-04-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester, polymer with oxiranylmethyl 2-methyl-2-propenoate, phenylmethyl 2-methyl-2-propenoate and phenylmethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

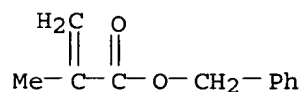
CRN 150624-86-5

CMF C14 H32 O4 Si3



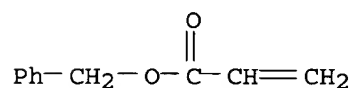
CM 2

CRN 2495-37-6  
CMF C11 H12 O2



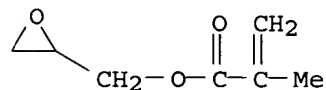
CM 3

CRN 2495-35-4  
CMF C10 H10 O2



CM 4

CRN 106-91-2  
CMF C7 H10 O3



IT 312260-55-2P 312260-91-6P 312260-96-1P  
532411-38-4P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)  
(macromonomer; electrophotog. liquid developer containing dispersion resin  
particles obtained by seed polymerization)

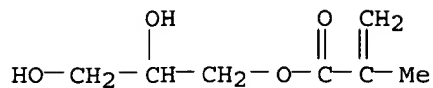
RN 312260-55-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester,  
telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-  
propenyl)oxyl]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4

CMF C7 H12 O4



CM 2

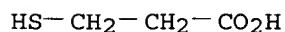
CRN 312260-54-1

CMF (C14 H32 O4 Si3)x . C3 H6 O2 S

CM 3

CRN 107-96-0

CMF C3 H6 O2 S



CM 4

CRN 312260-53-0

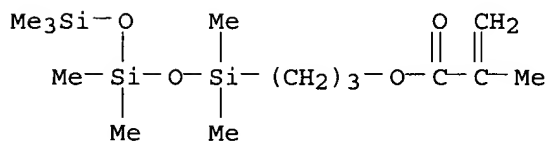
CMF (C14 H32 O4 Si3)x

CCI PMS

CM 5

CRN 150624-86-5

CMF C14 H32 O4 Si3



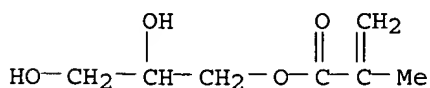
RN 312260-91-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(pentamethyldisiloxanyl)propyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4

CMF C7 H12 O4



CM 2

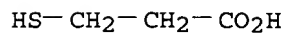
CRN 312260-90-5

CMF (C12 H26 O3 Si2)x . C3 H6 O2 S

CM 3

CRN 107-96-0

CMF C3 H6 O2 S



CM 4

CRN 92459-75-1

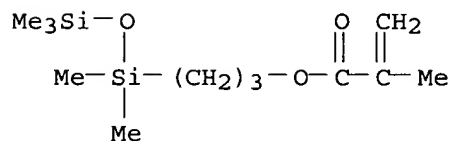
CMF (C12 H26 O3 Si2)x

CCI PMS

CM 5

CRN 18151-85-4

CMF C12 H26 O3 Si2



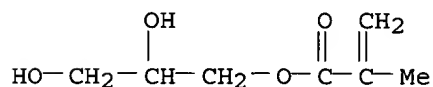
RN 312260-96-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,3-bis[(trimethylsilyl)oxy]propyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4

CMF C7 H12 O4



CM 2

CRN 312260-95-0

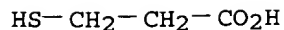
CMF (C13 H28 O4 Si2)x . C3 H6 O2 S

CM 3

CRN 107-96-0

CMF C3 H6 O2 S



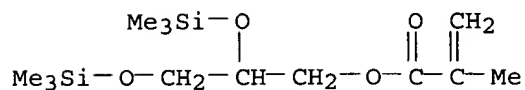


CM 4

CRN 312260-94-9  
CMF (C13 H28 O4 Si2)x  
CCI PMS

CM 5

CRN 143987-99-9  
CMF C13 H28 O4 Si2

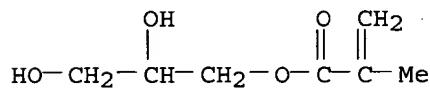


RN 532411-38-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(pentamethyldisiloxanyl)ethyl ester, telomer with 3-mercaptopropanoic acid, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

CM 1

CRN 5919-74-4  
CMF C7 H12 O4

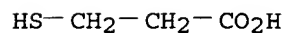


CM 2

CRN 532411-37-3  
CMF (C11 H24 O3 Si2)x . C3 H6 O2 S

CM 3

CRN 107-96-0  
CMF C3 H6 O2 S



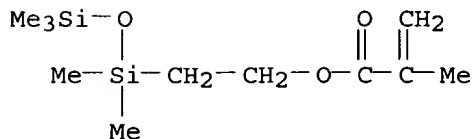
CM 4

CRN 532411-36-2  
CMF (C11 H24 O3 Si2)x  
CCI PMS

CM 5

CRN 25443-39-4

CMF C11 H24 O3 Si2



L26 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:17594 HCAPLUS

DOCUMENT NUMBER: 138:98158

TITLE: Liquid electrostatographic developer having good dispersion stability, re-dispersibility, and fixability

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003005458	A2	20030108	JP 2001-193243	20010626
PRIORITY APPLN. INFO.:			JP 2001-193243	20010626

AB The developers contain, in nonaq. solvents with elec. resistance  $\geq 109 \Omega$  and permittivity  $\leq 3.5$ , dispersed particles of resins (CSR) prepared by, in nonaq. solvents, seed polymerization of dispersions

containing  $\geq 1$  monofunctional monomers (A) which are soluble in the nonaq. solvents and become insol. by polymerization,  $\geq 1$  monofunctional macromonomers (MM) with  $M_n \leq 2 + 104$ , composed of polymers of mer units bearing F and/or Si-containing substituents and having one end of the main chains bonded to polymerizable double bonds represented by the general formula (MI, defined below), star-shaped copolymers (P, defined below) soluble in the nonaq. solvents as dispersion stabilizers, and seed particles (CR) with average particle diameter 0.05-1.0  $\mu\text{m}$ . MI =  $m_1\text{CH:C}m_2\text{J}_1$  [ $\text{J}_1 = \text{CO}_2, \text{OCO}, (\text{CH}_2)_d\text{CO}_2, (\text{CH}_2)_d\text{OCO}, \text{O}, \text{SO}_2, \text{CONHCO}_2, \text{CONHCONH}, \text{CONK}_1, \text{SO}_2\text{NK}_1, \text{phenylene}; \text{K}_1 = \text{C}_1\text{-22 alkyl}; d = 1\text{-4 integer}; m_1, m_2 = \text{H, halo, CN, C}_1\text{-7 hydrocarbyl}, \text{CO}_2\text{K}_2$  which may be bonded via hydrocarbylene;  $\text{K}_2 = \text{H, C}_1\text{-22 hydrocarbyl}$ ]. P = star-shaped copolymer with  $M_w 2 + 104\text{-}1 + 106$ , composed of  $\geq 3$  A-B-type block polymer chains bonded to organic residues at one edge of block A resp., wherein block A contain  $\geq 1$  polymer components equivalent to the monofunctional monomers A and polymer components selected from those bearing  $\geq 1$  polar groups selected from  $\text{PO}_3\text{H}_2, \text{CO}_2\text{H}, \text{SO}_3\text{H}, \text{OH}, \text{CHO}, \text{amino}, \text{PO}(\text{OH})\text{E}_1$  ( $\text{E}_1 = \text{E}_2, \text{OE}_2$ ;  $\text{E}_2 = \text{hydrocarbyl}$ ),  $\text{CONE}_3\text{E}_4, \text{SO}_2\text{NE}_3\text{E}_4$  ( $\text{E}_3, \text{E}_4 = \text{H, hydrocarbyl}$ ), and ring-type acid anhydride-containing groups and block B contain  $\geq 1$  polymer components selected from those with mer units represented by  $\text{CHb}_1\text{Cb}_2\text{AL}$  [ $\text{A} = \text{CO}_2, \text{OCO}, (\text{CH}_2)_x\text{CO}_2, (\text{CH}_2)_x\text{OCO}$  ( $x = 1\text{-3 integer}$ ),  $\text{O}$ ;  $\text{L} = \text{C} \geq 8$  aliphatic group;  $\text{b}_1, \text{b}_2 = \text{H, halo, CN, C}_1\text{-7 hydrocarbyl}, \text{CO}_2\text{Z}_1$

which may be bonded via hydrocarbylene (Z1 = H, C1-22 hydrocarbyl)]. Preferably, the nonaq. dispersions contain monofunctional monomers bearing amino groups and monofunctional monomers  $\geq 1$  bearing polar groups of PO<sub>3</sub>H<sub>2</sub>, SO<sub>3</sub>H, and SO<sub>2</sub>H.

IT 311807-36-0P 477210-59-6P, 1-(3-Methacryloxypropyl)-3-trimethylsilyloxy-1,1,3,3-tetramethyldisiloxane-methyl acrylate-methyl methacrylate-vinyl acetate graft copolymer 477572-75-1P  
477572-79-5P 484016-90-2P 484016-91-3P  
484016-95-7P 484016-96-8P 484016-97-9P  
484017-01-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell, prepared by seed polymerization; liquid electrostatog. developer having good dispersion stability, re-dispersibility, and fixability)

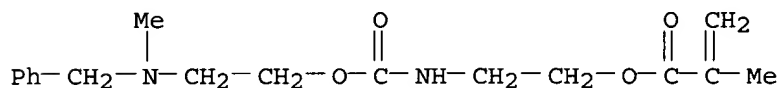
RN 311807-36-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-[[[2-[methyl(phenylmethyl)amino]ethoxy]carbonyl]amino]ethyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 305814-19-1

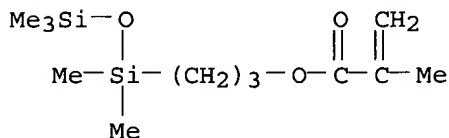
CMF C17 H24 N2 O4



CM 2

CRN 18151-85-4

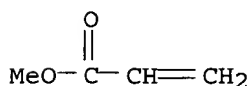
CMF C12 H26 O3 Si2



CM 3

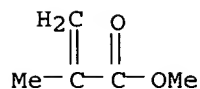
CRN 96-33-3

CMF C4 H6 O2



CM 4

CRN 80-62-6  
CMF C5 H8 O2

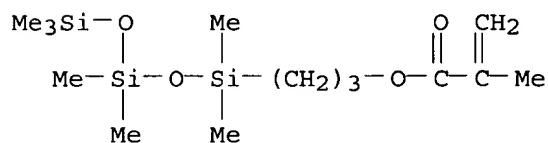


RN 477210-59-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 150624-86-5  
CMF C14 H32 O4 Si3



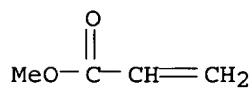
CM 2

CRN 108-05-4  
CMF C4 H6 O2



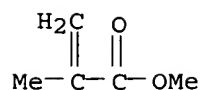
CM 3

CRN 96-33-3  
CMF C4 H6 O2



CM 4

CRN 80-62-6  
CMF C5 H8 O2

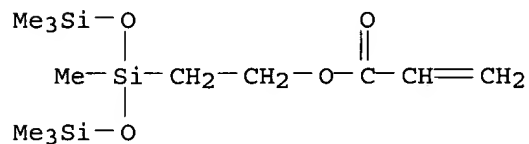


RN 477572-75-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
 N-[3-(dipropylamino)propyl]-2-propenamide, methyl 2-propenoate,  
 2-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]ethyl  
 2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate, graft (9CI)  
 (CA INDEX NAME)

CM 1

CRN 133726-21-3

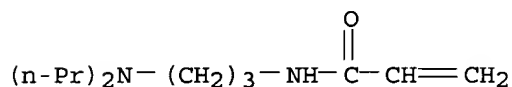
CMF C12 H28 O4 Si3



CM 2

CRN 65699-81-2

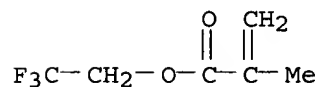
CMF C12 H24 N2 O



CM 3

CRN 352-87-4

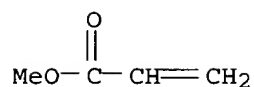
CMF C6 H7 F3 O2



CM 4

CRN 96-33-3

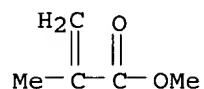
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



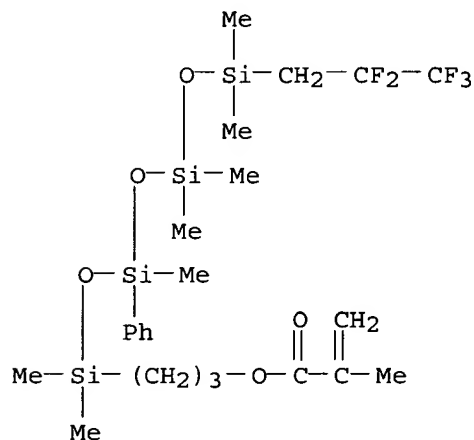
RN 477572-79-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[1,1,3,5,5,7,7-heptamethyl-7-(2,2,3,3,3-pentafluoropropyl)-3-phenyltetrasiloxanylpropyl ester, polymer with N-[4-(dimethylamino)phenyl]-N-methyl-2-propenamide, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 312261-18-0

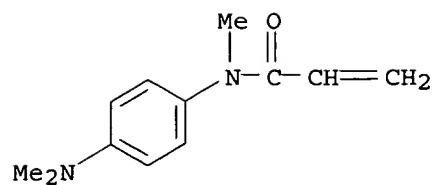
CMF C23 H39 F5 O5 Si4



CM 2

CRN 107314-56-7

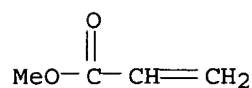
CMF C12 H16 N2 O



CM 3

CRN 96-33-3

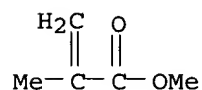
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



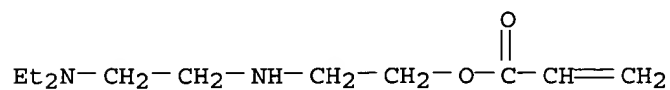
RN 484016-90-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with  
2-[[2-(diethylamino)ethyl]amino]ethyl 2-propenoate, methyl 2-propenoate  
and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl  
2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 305814-21-5

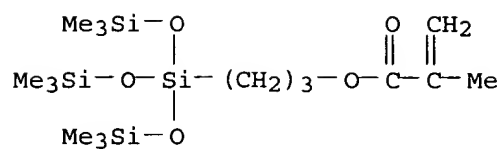
CMF C11 H22 N2 O2



CM 2

CRN 17096-07-0

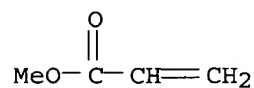
CMF C16 H38 O5 Si4



CM 3

CRN 96-33-3

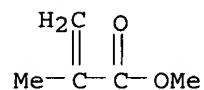
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



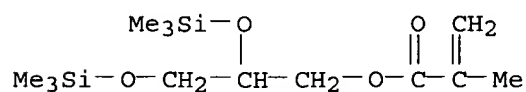
RN 484016-91-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with 2,3-bis[(trimethylsilyl)oxy]propyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-phosphonoethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 143987-99-9

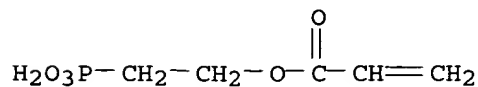
CMF C13 H28 O4 Si2



CM 2

CRN 87243-98-9

CMF C5 H9 O5 P

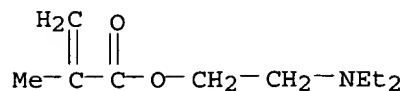




CM 3

CRN 105-16-8

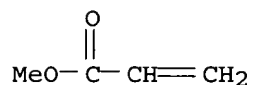
CMF C10 H19 N O2



CM 4

CRN 96-33-3

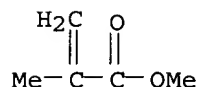
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



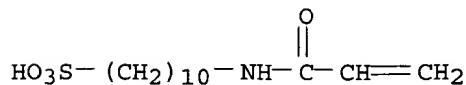
RN 484016-95-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate, methyl 2-propenoate, 10-[(1-oxo-2-propenyl)amino]-1-decanesulfonic acid and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 308338-75-2

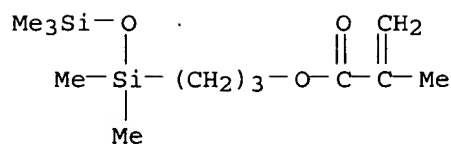
CMF C13 H25 N O4 S



CM 2

CRN 18151-85-4

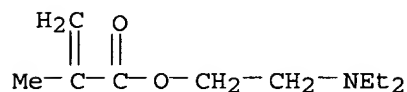
CMF C12 H26 O3 Si2



CM 3

CRN 105-16-8

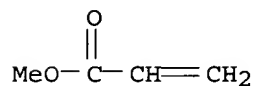
CMF C10 H19 N O2



CM 4

CRN 96-33-3

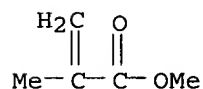
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



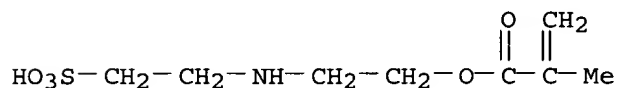
RN 484016-96-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,3-bis[(trimethylsilyl)oxy]propyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-[(2-sulfoethyl)amino]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 308338-77-4

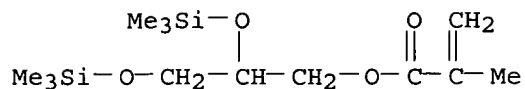
CMF C8 H15 N O5 S



CM 2

CRN 143987-99-9

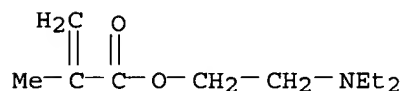
CMF C13 H28 O4 Si2



CM 3

CRN 105-16-8

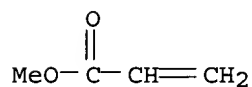
CMF C10 H19 N O2



CM 4

CRN 96-33-3

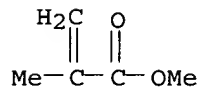
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



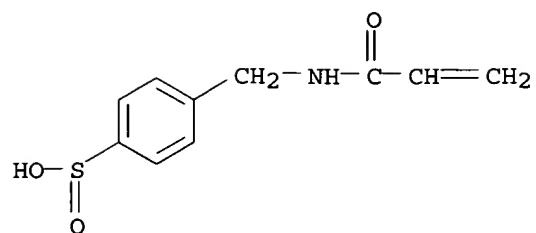
RN 484016-97-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with 3-[1,1,3,5,5,5-hexamethyl-3-(2,2,2-trifluoroethyl)trisiloxanyl]propyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 4-[[[(1-oxo-2-propenyl)amino]methyl]benzenesulfinic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 333362-33-7

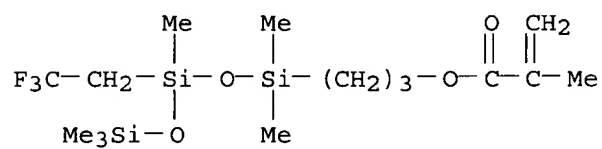
CMF C10 H11 N O3 S



CM 2

CRN 308278-77-5

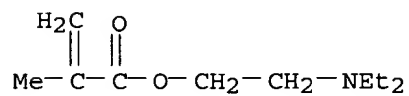
CMF C15 H31 F3 O4 Si3



CM 3

CRN 105-16-8

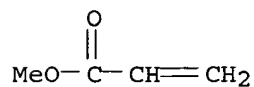
CMF C10 H19 N O2



CM 4

CRN 96-33-3

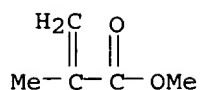
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



RN 484017-01-8 HCAPLUS

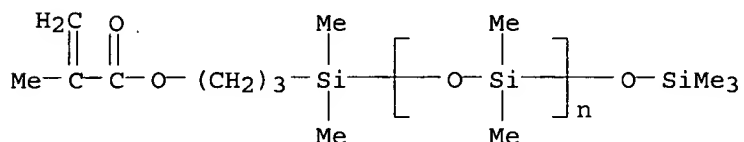
CN 2-Propenoic acid, 2-methyl-, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)], ethene and ethenyl acetate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)<sub>n</sub> C12 H26 O3 Si2

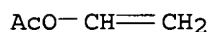
CCI PMS



CM 2

CRN 108-05-4

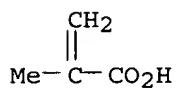
CMF C4 H6 O2



CM 3

CRN 79-41-4

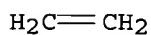
CMF C4 H6 O2



CM 4

CRN 74-85-1

CMF C2 H4



L26 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2003:15822 HCAPLUS

DOCUMENT NUMBER: 138:98215  
 TITLE: Liquid electrophotographic developers with good dispersibility, fixability, and durability in printing plate making  
 INVENTOR(S): Kato, Eiichi  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

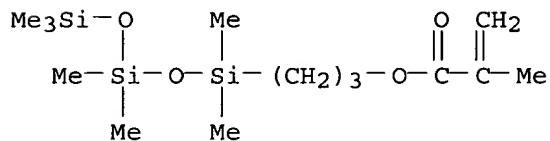
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003005455	A2	20030108	JP 2001-187234	20010620
PRIORITY APPLN. INFO.:			JP 2001-187234	20010620

AB The liquid developers comprise nonaq. solvents with elec. resistivity  $\geq 109 \Omega\text{-cm}$  and dielec. constant  $\leq 3.5$  and dispersed core-shell resin particles, which are manufactured by seed-polymerizing (A) nonaq. solvent-soluble monofunctional monomers that become insol. by polymerization and (B) comonomers having F- and/or Si-containing groups in the presence of seed particles with average diameter  $0.05\text{-}1.0 \mu\text{m}$  and nonaq. solvent-soluble crosslinked polymer dispersants having structures of  $\text{CHb1C(V0L)b2}$  [ $\text{V0} = \text{CO}_2, (\text{CH}_2)_r\text{CO}_2, \text{O}, \text{QX}, \text{etc.}; \text{Q} = \text{phenylene}; \text{X} = \text{linkage}, \text{O}, \text{OCO}, \text{CO}_2; \text{L} = \text{C8-32-alkyl}, \text{alkenyl}; \text{b1}, \text{b2} = \text{H}, \text{halo}, \text{cyano}, \text{C1-7-hydrocarbyl}, \text{CO}_2\text{D1}; \text{D1} = \text{H}, \text{C1-22-hydrocarbyl}; \text{r} = 1\text{-}12]$ .  
 IT 477210-59-6P 477210-62-1P 477210-92-7P  
 483322-50-5P 483322-52-7P 484047-04-3P  
 484047-05-4P 484047-12-3P 484047-13-4P  
 484047-14-5P 484047-15-6P 484047-16-7P  
 484047-18-9P 484047-19-0P 484047-20-3P  
 484047-21-4P 484047-22-5P 484047-23-6P  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)  
 (toner particle; liquid electrophotog. developers containing seed -polymerized graft polymer dispersants with good dispersive power)  
 RN 477210-59-6 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

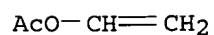
CRN 150624-86-5

CMF C14 H32 O4 Si3



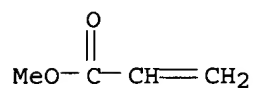
CM 2

CRN 108-05-4  
CMF C4 H6 O2



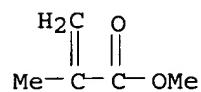
CM 3

CRN 96-33-3  
CMF C4 H6 O2



CM 4

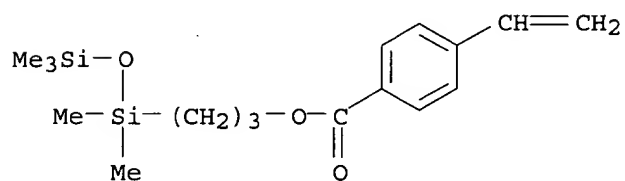
CRN 80-62-6  
CMF C5 H8 O2



RN 477210-62-1 HCAPLUS  
CN Benzoic acid, 4-ethenyl-, 3-(pentamethyldisiloxanyl)propyl ester, polymer with ethenyl acetate, graft (9CI) (CA INDEX NAME)

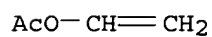
CM 1

CRN 477210-61-0  
CMF C17 H28 O3 Si2



CM 2

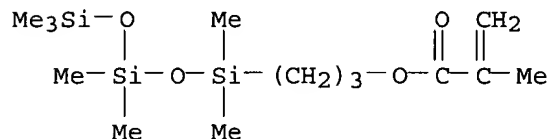
CRN 108-05-4  
CMF C4 H6 O2



RN 477210-92-7 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, decyl ester, polymer with ethene, ethenyl acetate and 3-(heptamethyltrisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

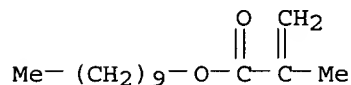
CM 1

CRN 150624-86-5  
 CMF C14 H32 O4 Si3



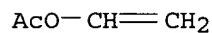
CM 2

CRN 3179-47-3  
 CMF C14 H26 O2



CM 3

CRN 108-05-4  
 CMF C4 H6 O2



CM 4

CRN 74-85-1  
 CMF C2 H4

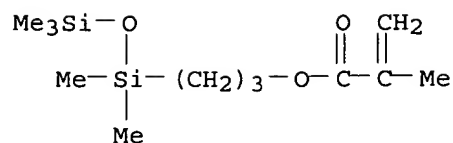


RN 483322-50-5 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, methyl 2-propenoate and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 18151-85-4  
 CMF C12 H26 O3 Si2

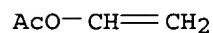




CM 2

CRN 108-05-4

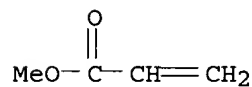
CMF C4 H6 O2



CM 3

CRN 96-33-3

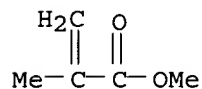
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



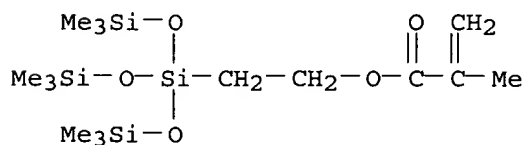
RN 483322-52-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenyl acetate, methyl 2-propenoate and 2-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 130167'-27-0

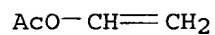
CMF C15 H36 O5 Si4



CM 2

CRN 108-05-4

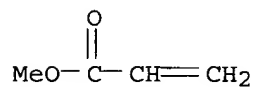
CMF C4 H6 O2



CM 3

CRN 96-33-3

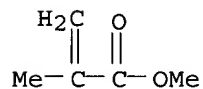
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



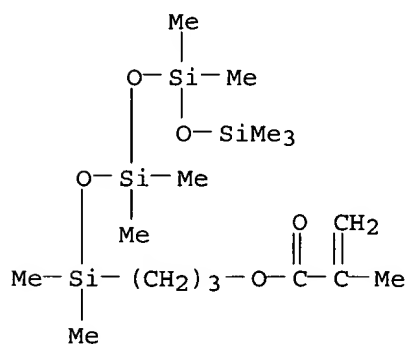
RN 484047-04-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-(nonamethyltetrasiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

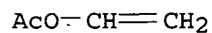
CRN 77865-90-8

CMF C16 H38 O5 Si4



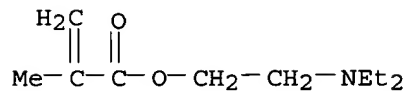
CM 2

CRN 108-05-4  
CMF C4 H6 O2



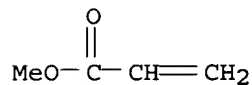
CM 3

CRN 105-16-8  
CMF C10 H19 N O2



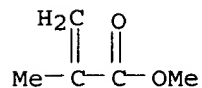
CM 4

CRN 96-33-3  
CMF C4 H6 O2



CM 5

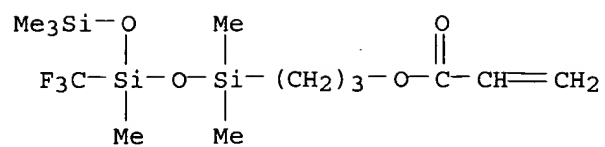
CRN 80-62-6  
CMF C5 H8 O2



RN 484047-05-4 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-phosphonoethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

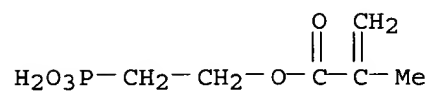
CM 1

CRN 477210-63-2  
CMF C13 H27 F3 O4 Si3



CM 2

CRN 80730-17-2  
CMF C6 H11 O5 P



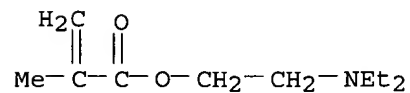
CM 3

CRN 108-05-4  
CMF C4 H6 O2



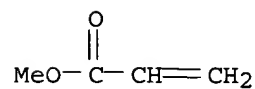
CM 4

CRN 105-16-8  
CMF C10 H19 N O2



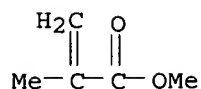
CM 5

CRN 96-33-3  
CMF C4 H6 O2



CM 6

CRN 80-62-6  
CMF C5 H8 O2



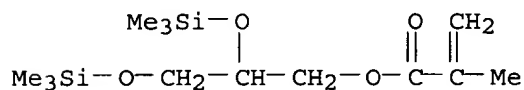
RN 484047-12-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,3-bis[(trimethylsilyl)oxy]propyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-(4-morpholinyl)ethyl 2-methyl-2-propenoate, graft (9CI)  
(CA INDEX NAME)

CM 1

CRN 143987-99-9

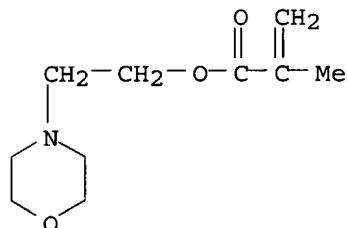
CMF C13 H28 O4 Si2



CM 2

CRN 2997-88-8

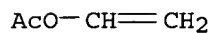
CMF C10 H17 N O3



CM 3

CRN 108-05-4

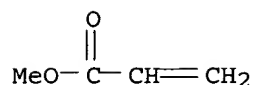
CMF C4 H6 O2



CM 4

CRN 96-33-3

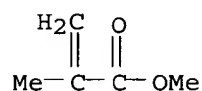
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



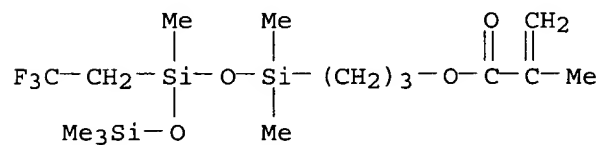
RN 484047-13-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[1,1,3,5,5,5-hexamethyl-3-(2,2,2-trifluoroethyl)trisiloxanyl]propyl ester, polymer with 2-[[2-(dimethylamino)ethyl]methylamino]ethyl 2-propenoate, ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI)  
(CA INDEX NAME)

CM 1

CRN 308278-77-5

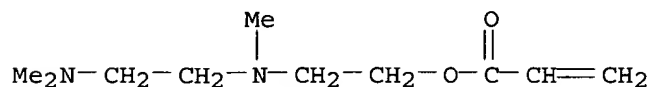
CMF C15 H31 F3 O4 Si3



CM 2

CRN 21567-47-5

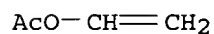
CMF C10 H20 N2 O2



CM 3

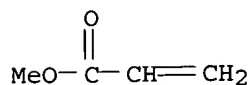
CRN 108-05-4

CMF C4 H6 O2



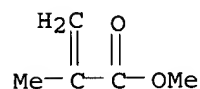
CM 4

CRN 96-33-3  
CMF C4 H6 O2



CM 5

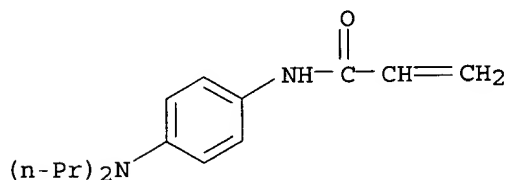
CRN 80-62-6  
CMF C5 H8 O2



RN 484047-14-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-[1,1,3,5,5,7,7-heptamethyl-7-(2,2,3,3,4,4,5,5,5-nonafluoropentyl)-3-phenyltetrasiloxanyl]propyl ester, polymer with N-[4-(dipropylamino)phenyl]-2-propenamide, ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

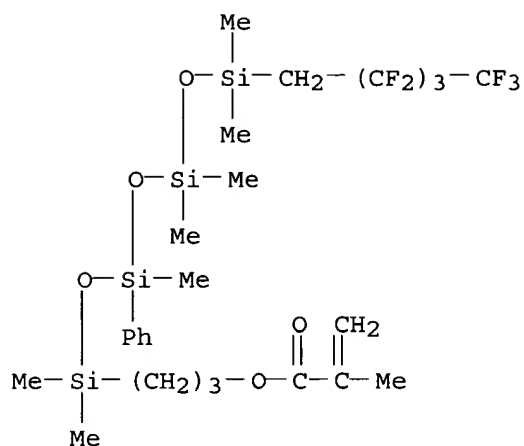
CM 1

CRN 477210-82-5  
CMF C15 H22 N2 O



CM 2

CRN 308278-79-7  
CMF C25 H39 F9 O5 Si4



CM 3

CRN 108-05-4

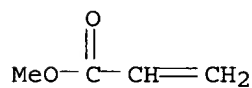
CMF C4 H6 O2



CM 4

CRN 96-33-3

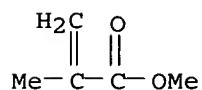
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



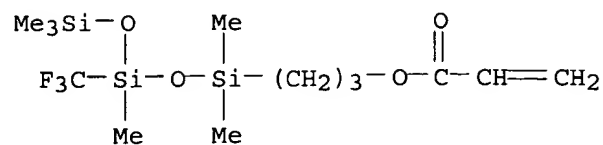
RN 484047-15-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-sulfopropyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

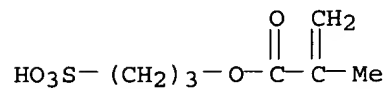


CRN 477210-63-2  
CMF C13 H27 F3 O4 Si3



CM 2

CRN 7582-21-0  
CMF C7 H12 O5 S



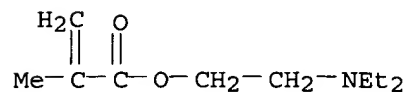
CM 3

CRN 108-05-4  
CMF C4 H6 O2



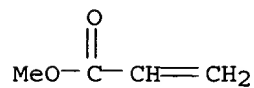
CM 4

CRN 105-16-8  
CMF C10 H19 N O2



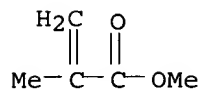
CM 5

CRN 96-33-3  
CMF C4 H6 O2



CM 6

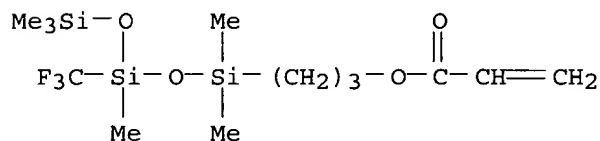
CRN 80-62-6  
CMF C5 H8 O2



RN 484047-16-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-sulfinophenyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

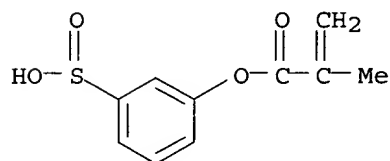
CM 1

CRN 477210-63-2  
CMF C13 H27 F3 O4 Si3



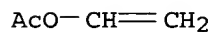
CM 2

CRN 333362-28-0  
CMF C10 H10 O4 S



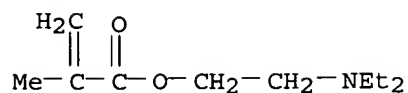
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

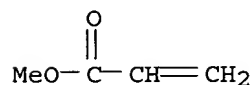
CRN 105-16-8  
CMF C10 H19 N O2



CM 5

CRN 96-33-3

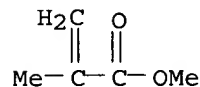
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



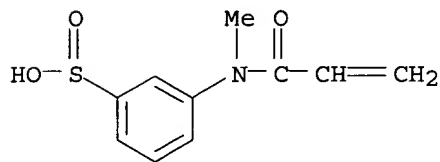
RN 484047-18-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, 3-[methyl(1-oxo-2-propenyl)amino]benzenesulfinic acid and methyl 2-propenoate, graft (9CI)  
(CA INDEX NAME)

CM 1

CRN 484047-17-8

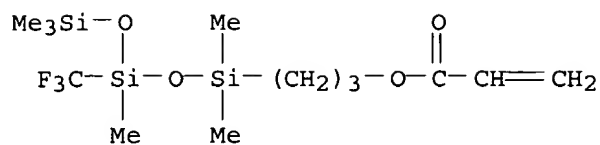
CMF C10 H11 N O3 S



CM 2

CRN 477210-63-2

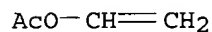
CMF C13 H27 F3 O4 Si3



CM 3

CRN 108-05-4

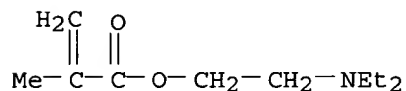
CMF C4 H6 O2



CM 4

CRN 105-16-8

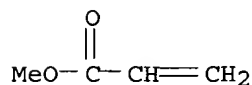
CMF C10 H19 N O2



CM 5

CRN 96-33-3

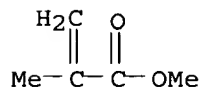
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



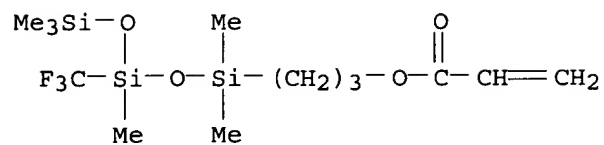
RN 484047-19-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 10-[(1-oxo-2-propenyl)amino]-1-decanesulfonic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-63-2

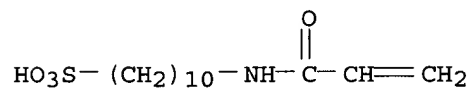
CMF C13 H27 F3 O4 Si3



CM 2

CRN 308338-75-2

CMF C13 H25 N O4 S



CM 3

CRN 108-05-4

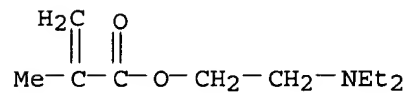
CMF C4 H6 O2



CM 4

CRN 105-16-8

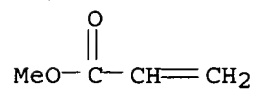
CMF C10 H19 N O2



CM 5

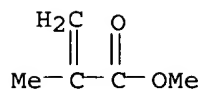
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CMF C4 H6 O2



CM 6

CRN 80-62-6  
CMF C5 H8 O2

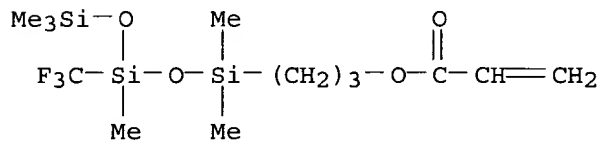


RN 484047-20-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-[(2-sulfoethyl)amino]ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

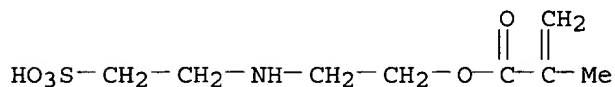
CM 1

CRN 477210-63-2  
CMF C13 H27 F3 O4 Si3



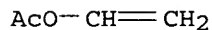
CM 2

CRN 308338-77-4  
CMF C8 H15 N O5 S



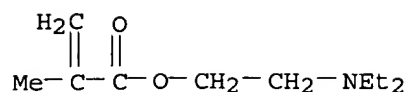
CM 3

CRN 108-05-4  
CMF C4 H6 O2



CM 4

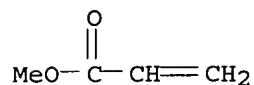
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CMF C10 H19 N O2



CM 5

CRN 96-33-3

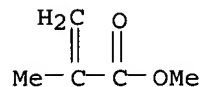
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



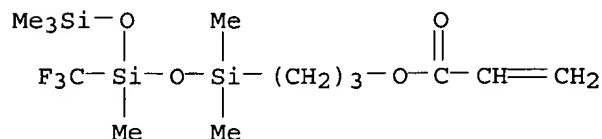
RN 484047-21-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 4-[[[1-oxo-2-propenyl)amino]methyl]benzenesulfinic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-63-2

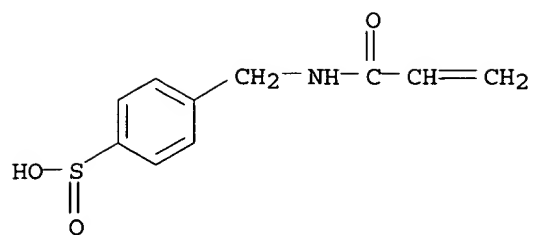
CMF C13 H27 F3 O4 Si3



CM 2

CRN 333362-33-7

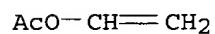
CMF C10 H11 N O3 S



CM 3

CRN 108-05-4

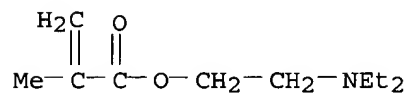
CMF C4 H6 O2



CM 4

CRN 105-16-8

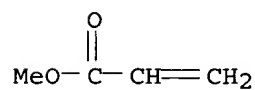
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CM 5

CRN 96-33-3

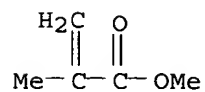
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CM 6

CRN 80-62-6

CMF C5 H8 O2



RN 484047-22-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 4-ethenylphenyl dihydrogen phosphate,

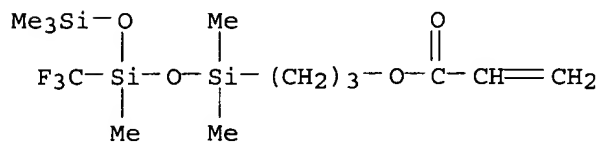


3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl  
2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft  
(9CI) (CA INDEX NAME)

CM 1

CRN 477210-63-2

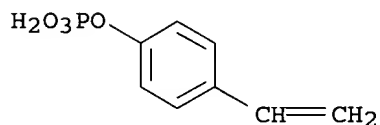
CMF C13 H27 F3 O4 Si3



CM 2

CRN 80122-59-4

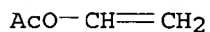
CMF C8 H9 O4 P



CM 3

CRN 108-05-4

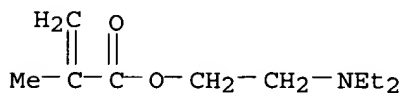
CMF C4 H6 O2



CM 4

CRN 105-16-8

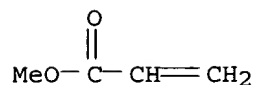
CMF C10 H19 N O2



CM 5

CRN 96-33-3

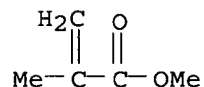
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



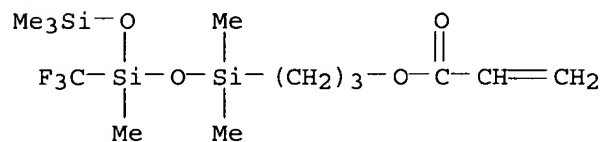
RN 484047-23-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with ethenyl acetate, 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and [4-[(1-oxo-2-propenyl)amino]phenyl]phosphonic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-63-2

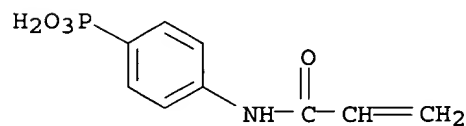
CMF C13 H27 F3 O4 Si3



CM 2

CRN 149234-87-7

CMF C9 H10 N O4 P



CM 3

CRN 108-05-4

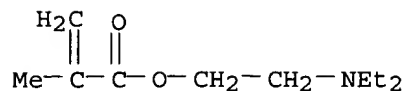
CMF C4 H6 O2



CM 4

CRN 105-16-8

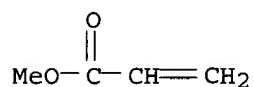
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CM 5

CRN 96-33-3

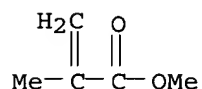
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



L26 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:14506 HCAPLUS

DOCUMENT NUMBER: 138:98154

TITLE: Liquid electrostatographic developer having good dispersion stability, re-dispersibility, and fixability

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

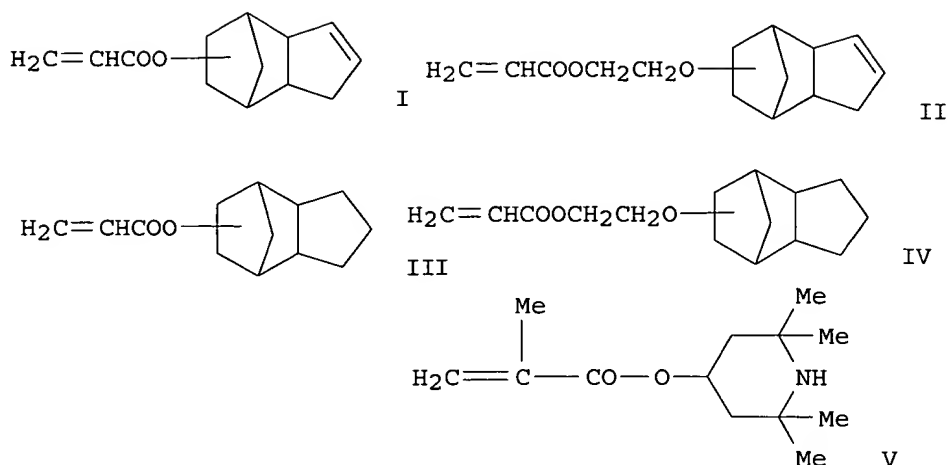
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2003005459	A2	20030108	JP 2001-193244	20010626
PRIORITY APPLN. INFO.:			JP 2001-193244	20010626

GI



AB The developers contain, in nonaq. solvents with elec. resistance  $\geq 109 \Omega$  and permittivity  $\leq 3.5$ , dispersed particles of resins (CSR) prepared by, in nonaq. solvents, seed polymerization of dispersions

containing  $\geq 1$  monofunctional monomers (A),  $\geq 1$  monofunctional monomers (B) bearing F and/or Si-containing substituents, star-shaped copolymers (P, defined below) soluble in the nonaq. solvents as dispersion stabilizers, and seed particles (CR) with average particle diameter  $0.05-1.0 \mu\text{m}$ . P = star-shaped block copolymer with  $M_w 2 + 10^4-1 + 10^6$ , composed of  $\geq 3$  A-B-type block polymer chains bonded to organic residues at one edge of block A resp., wherein block A contain  $\geq 1$  polymer components equivalent to the monofunctional monomers A and polymer components selected from those bearing  $\geq 1$  polar groups selected from  $\text{PO}_3\text{H}_2$ ,  $\text{CO}_2\text{H}$ ,  $\text{SO}_3\text{H}$ ,  $\text{OH}$ ,  $\text{CHO}$ , amino,  $\text{PO}(\text{OH})\text{E}_1$  ( $\text{E}_1 = \text{E}_2$ ,  $\text{OE}_2$ ;  $\text{E}_2 =$  hydrocarbyl),  $\text{CONE}_3\text{E}_4$ ,  $\text{SO}_2\text{NE}_3\text{E}_4$  ( $\text{E}_3$ ,  $\text{E}_4 = \text{H}$ , hydrocarbyl), and ring-type acid anhydride-containing groups and block B contain  $\geq 1$  polymer components selected from those with mer units represented by  $\text{CHb}_1\text{Cb}_2\text{AL}$  [ $\text{A} = \text{CO}_2$ ,  $\text{OCO}$ ,  $(\text{CH}_2)_x\text{CO}_2$ ,  $(\text{CH}_2)_x\text{OCO}$  ( $x = 1-3$  integer),  $\text{O}$ ;  $\text{L} = \text{C} \geq 8$  aliphatic group;  $\text{b}_1$ ,  $\text{b}_2 = \text{H}$ , halo,  $\text{CN}$ ,  $\text{C}_{1-7}$  hydrocarbyl,  $\text{CO}_2\text{Z}_1$  which may be bonded via hydrocarbylene ( $\text{Z}_1 = \text{H}$ ,  $\text{C}_{1-22}$  hydrocarbyl)]. Preferably, the nonaq. dispersions contain monofunctional monomers bearing amino groups and monofunctional monomers  $\geq 1$  bearing polar groups of  $\text{PO}_3\text{H}_2$ ,  $\text{SO}_3\text{H}$ , and  $\text{SO}_2\text{H}$ .

IT 477210-59-6P 477210-60-9P 477210-62-1P  
477210-64-3P 477210-79-0P 477210-81-4P  
477210-83-6P 483322-55-0P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell, prepared by seed polymerization; liquid electrostatog. developer having good dispersion stability, re-dispersibility, and fixability)

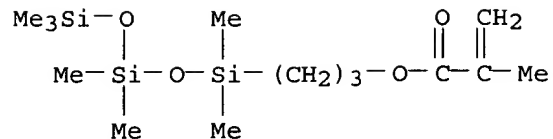
RN 477210-59-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 150624-86-5

CMF C14 H32 O4 Si3



CM 2

CRN 108-05-4

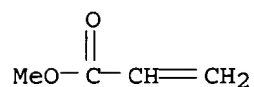
CMF C4 H6 O2



CM 3

CRN 96-33-3

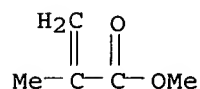
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



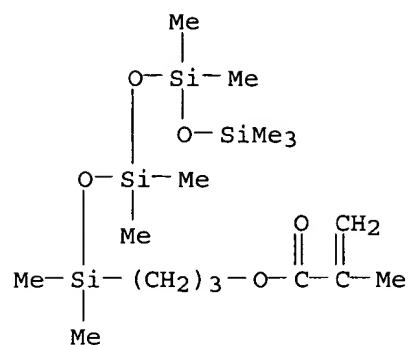
RN 477210-60-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-(nonamethyltetrasiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 77865-90-8

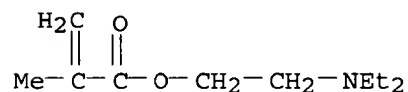
CMF C16 H38 O5 Si4



CM 2

CRN 105-16-8

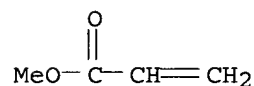
CMF C10 H19 N O2



CM 3

CRN 96-33-3

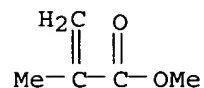
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



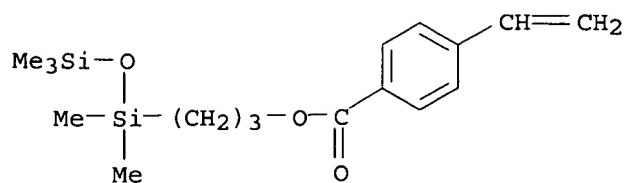
RN 477210-62-1 HCAPLUS

CN Benzoic acid, 4-ethenyl-, 3-(pentamethyldisiloxanyl)propyl ester, polymer with ethenyl acetate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-61-0

CMF C17 H28 O3 Si2



CM 2

CRN 108-05-4

CMF C4 H6 O2



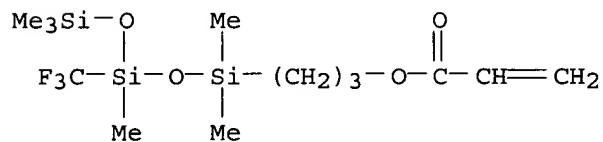
RN 477210-64-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with 3-[1,1,3,5,5,5-hexamethyl-3-(trifluoromethyl)trisiloxanyl]propyl 2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-(phosphonooxy)ethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-63-2

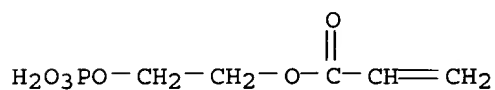
CMF C13 H27 F3 O4 Si3



CM 2

CRN 32120-16-4

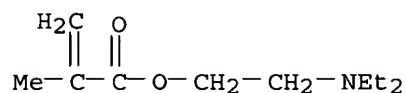
CMF C5 H9 O6 P



CM 3

CRN 105-16-8

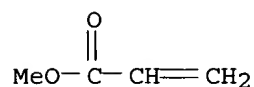
CMF C10 H19 N O2



CM 4

CRN 96-33-3

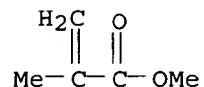
CMF C4 H6 O2



CM 5

CRN 80-62-6

CMF C5 H8 O2



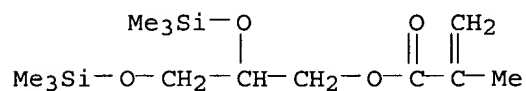
RN 477210-79-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2,3-bis[(trimethylsilyl)oxy]propyl ester, polymer with methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-(4-morpholinyl)ethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 143987-99-9

CMF C13 H28 O4 Si2

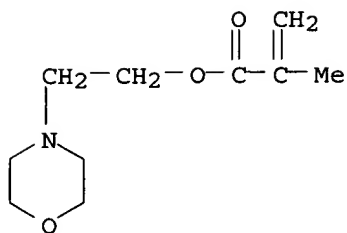


CM 2

CRN 2997-88-8

CMF C10 H17 N O3

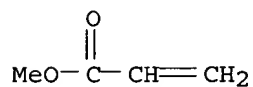




CM 3

CRN 96-33-3

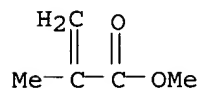
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



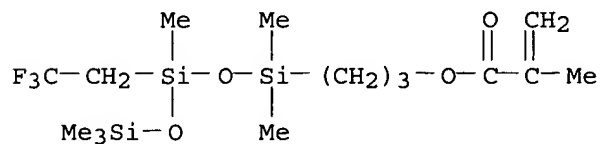
RN 477210-81-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[1,1,3,5,5,5-hexamethyl-3-(2,2,2-trifluoroethyl)trisiloxanyl]propyl ester, polymer with 2-[[2-(dimethylamino)ethyl]methylamino]ethyl 2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 308278-77-5

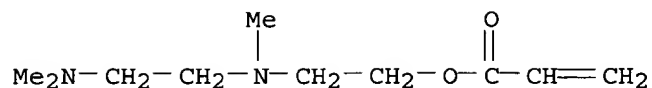
CMF C15 H31 F3 O4 Si3



CM 2

CRN 21567-47-5

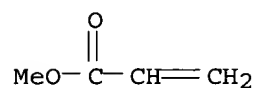
CMF C10 H20 N2 O2



CM 3

CRN 96-33-3

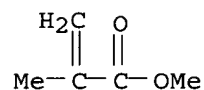
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



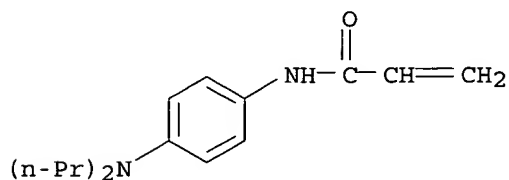
RN 477210-83-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[1,1,3,5,5,7,7-heptamethyl-7-(2,2,3,3,4,4,5,5,5-nonafluoropentyl)-3-phenyltetrasiloxanyl]propyl ester, polymer with N-[4-(dipropylamino)phenyl]-2-propenamide, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 477210-82-5

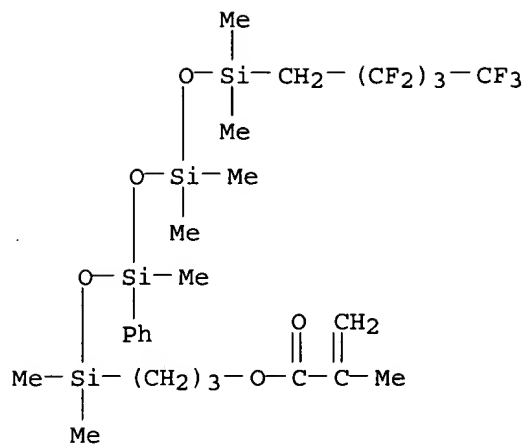
CMF C15 H22 N2 O



CM 2

CRN 308278-79-7

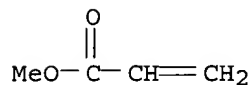
CMF C25 H39 F9 O5 Si4



CM 3

CRN 96-33-3

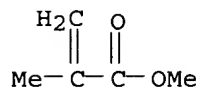
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



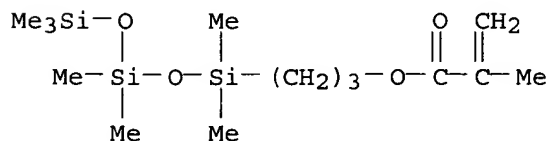
RN 483322-55-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethene, ethenyl acetate and 3-(heptamethyltrisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 150624-86-5

CMF C14 H32 O4 Si3



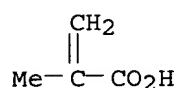
CM 2

CRN 108-05-4  
CMF C4 H6 O2



CM 3

CRN 79-41-4  
CMF C4 H6 O2



CM 4

CRN 74-85-1  
CMF C2 H4



L26 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:14505 HCAPLUS

DOCUMENT NUMBER: 138:98153

TITLE: Liquid electrophotographic developers having good dispersion stability and fixability

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003005454	A2	20030108	JP 2001-187233	20010620
PRIORITY APPLN. INFO.:			JP 2001-187233	20010620

AB The developers contain, in nonaq. solvents of resistivity  $\geq 10^9$   $\Omega\text{cm}$  and dielec. constant  $\leq 3.5$ , particulate resin dispersants which are prepared by seed polymerization of soluble monofunctional monomers, Si- and/or F-containing macromonomers of  $M_w \leq 2 + 10^4$  having  $M_1\text{CH:CM}_2\text{J}_1$  [ $\text{J}_1 = \text{CO}_2, \text{OCO}, (\text{CH}_2)\text{dCO}_2$ , etc.;  $M_1, M_2 = \text{H}, \text{halo}, \text{cyano}, \text{C}_1\text{-7 hydrocarbyl}, \text{CO}_2\text{K}_2$  ( $\text{K}_2 = \text{H}, \text{C}_1\text{-22 hydrocarbyl}$ )] at one terminal, and soluble macromol. dispersing agents having crosslinked main chain and repeating unit  $\text{B}_1\text{CHCB}_2\text{V}_0\text{L}$  [ $\text{V}_0 = \text{CO}_2, \text{OCO}$ , etc.;  $\text{L} = \text{C}_8\text{-32 alk(en)yl}$ ;  $\text{B}_1, \text{B}_2 = \text{H}$ ,

halo, cyano, C1-7 hydrocarbyl, CO2D1 (D1 = H, C1-22 hydrocarbyl)] in nonaq. solvents in the presence of seed particles of average diameter 0.05-1.0  $\mu\text{m}$ . The developers are useful for electrophotog. platemaking systems employing large master plates.

IT 477210-59-6P 483343-17-5P 483343-23-3P  
483343-25-5P 483343-30-2P 483343-35-7P  
483343-48-2P 483343-51-7P 483343-54-0P  
483343-65-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(core-shell; liquid electrophotog. developers containing **seed** -polymerized graft polymer dispersants with good dispersive power)

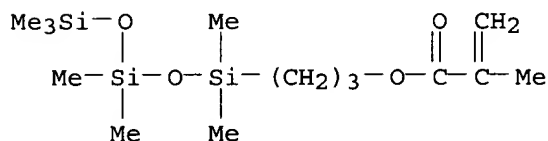
RN 477210-59-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(heptamethyltrisiloxanyl)propyl ester, polymer with ethenyl acetate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 150624-86-5

CMF C14 H32 O4 Si3



CM 2

CRN 108-05-4

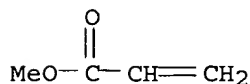
CMF C4 H6 O2



CM 3

CRN 96-33-3

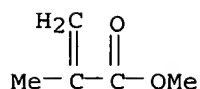
CMF C4 H6 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



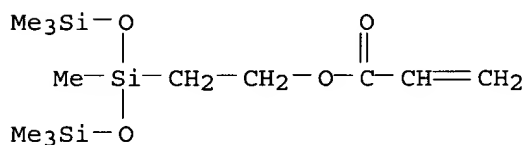
RN 483343-17-5 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-[3-(dipropylamino)propyl]-2-propenamide, hexadecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate, 2-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]ethyl 2-propenoate and 2,2,2-trifluoroethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 133726-21-3

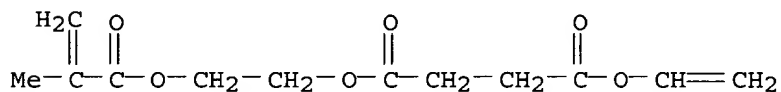
CMF C12 H28 O4 Si3



CM 2

CRN 100904-40-3

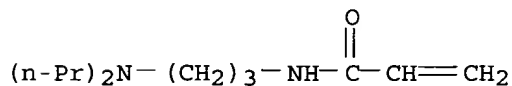
CMF C12 H16 O6



CM 3

CRN 65699-81-2

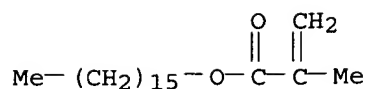
CMF C12 H24 N2 O



CM 4

CRN 2495-27-4

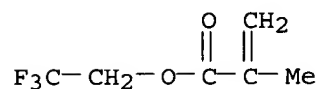
CMF C20 H38 O2



CM 5

CRN 352-87-4

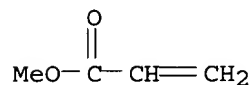
CMF C6 H7 F3 O2



CM 6

CRN 96-33-3

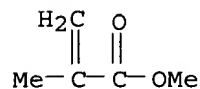
CMF C4 H6 O2



CM 7

CRN 80-62-6

CMF C5 H8 O2



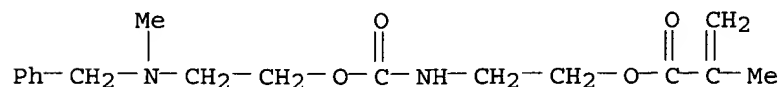
RN 483343-23-3 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with hexadecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-[[[2-[methyl(phenylmethyl)amino]ethoxy]carbonyl]amino]ethyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-(pentamethyldisiloxanyl)propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 305814-19-1

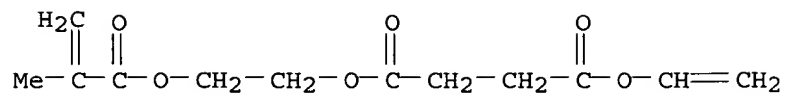
CMF C17 H24 N2 O4



CM 2

CRN 100904-40-3

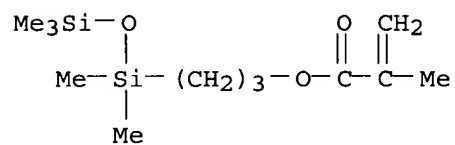
CMF C12 H16 O6



CM 3

CRN 18151-85-4

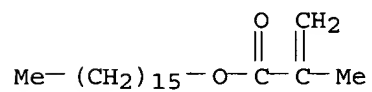
CMF C12 H26 O3 Si2



CM 4

CRN 2495-27-4

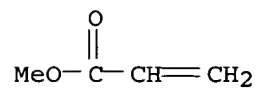
CMF C20 H38 O2



CM 5

CRN 96-33-3

CMF C4 H6 O2

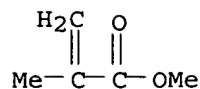


CM 6

CRN 80-62-6

CMF C5 H8 O2





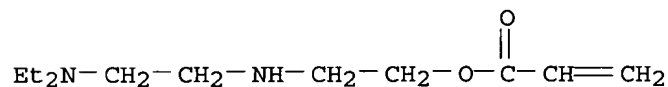
RN 483343-25-5 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-[[2-(diethylamino)ethyl]amino]ethyl 2-propenoate, hexadecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 305814-21-5

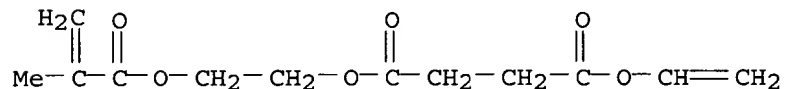
CMF C11 H22 N2 O2



CM 2

CRN 100904-40-3

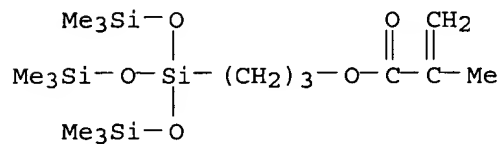
CMF C12 H16 O6



CM 3

CRN 17096-07-0

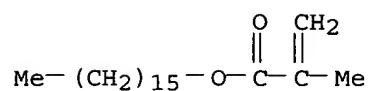
CMF C16 H38 O5 Si4



CM 4

CRN 2495-27-4

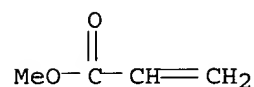
CMF C20 H38 O2



CM 5

CRN 96-33-3

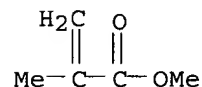
CMF C4 H6 O2



CM 6

CRN 80-62-6

CMF C5 H8 O2



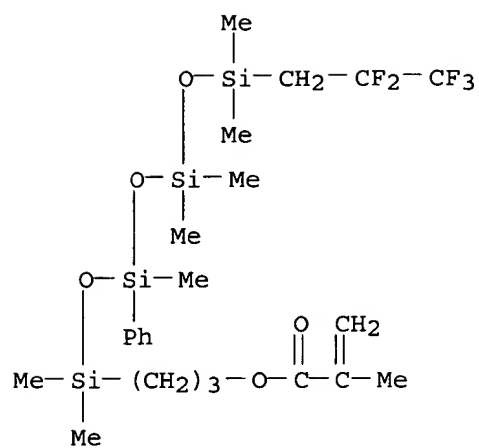
RN 483343-30-2 HCAPLUS

CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-[4-(dimethylamino)phenyl]-N-methyl-2-propenamide, 3-[1,1,3,5,5,7,7-heptamethyl-7-(2,2,3,3,3-pentafluoropropyl)-3-phenyltetrasiloxanyl]propyl 2-methyl-2-propenoate, hexadecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 312261-18-0

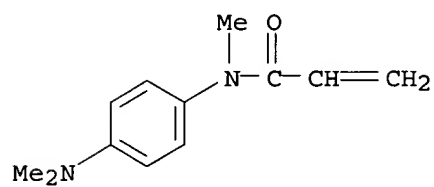
CMF C23 H39 F5 O5 Si4



CM 2

CRN 107314-56-7

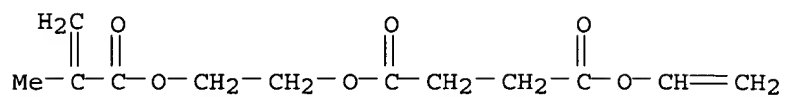
CMF C12 H16 N2 O



CM 3

CRN 100904-40-3

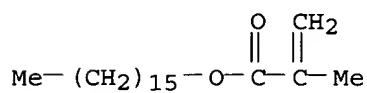
CMF C12 H16 O6



CM 4

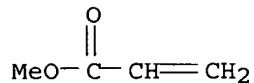
CRN 2495-27-4

CMF C20 H38 O2



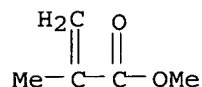
CM 5

CRN 96-33-3  
CMF C4 H6 O2



CM 6

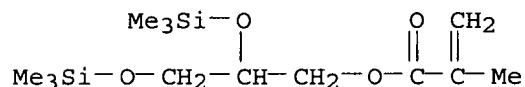
CRN 80-62-6  
CMF C5 H8 O2



RN 483343-35-7 HCAPLUS  
CN Butanedioic acid, ethenyl 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2,3-bis[(trimethylsilyl)oxy]propyl 2-methyl-2-propenoate, diethenylbenzene, 2-(diethylamino)ethyl 2-methyl-2-propenoate, hexadecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate, octadecyl 2-methyl-2-propenoate and 2-phosphonoethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

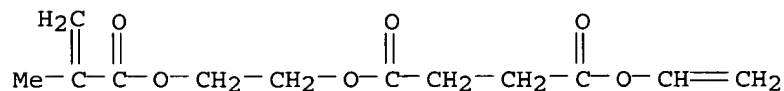
CM 1

CRN 143987-99-9  
CMF C13 H28 O4 Si2



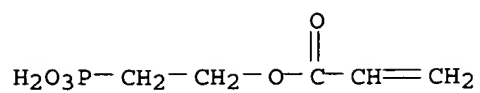
CM 2

CRN 100904-40-3  
CMF C12 H16 O6



CM 3

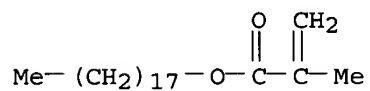
CRN 87243-98-9  
CMF C5 H9 O5 P



CM 4

CRN 32360-05-7

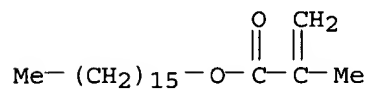
CMF C22 H42 O2



CM 5

CRN 2495-27-4

CMF C20 H38 O2

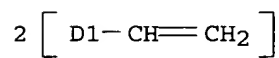


CM 6

CRN 1321-74-0

CMF C10 H10

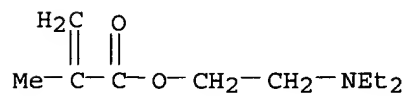
CCI IDS



CM 7

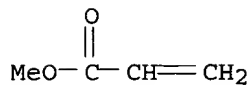
CRN 105-16-8

CMF C10 H19 N O2



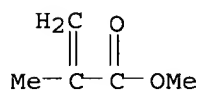
CM 8

CRN 96-33-3  
CMF C4 H6 O2



CM 9

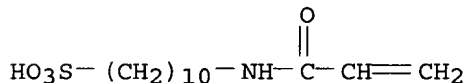
CRN 80-62-6  
CMF C5 H8 O2



RN 483343-48-2 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
2-(diethylamino)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,  
methyl 2-propenoate, octadecyl 2-methyl-2-propenoate, 10-[(1-oxo-2-  
propenyl)amino]-1-decanesulfonic acid, 2-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]ethyl 2-propenoate and  
2,2,2-trifluoroethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

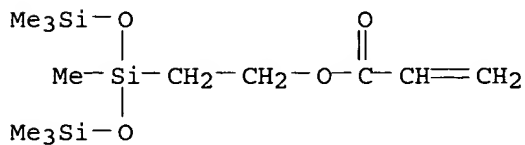
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CRN 308338-75-2  
CMF C13 H25 N O4 S



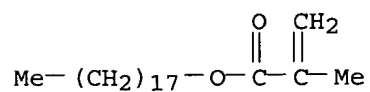
CM 2

CRN 133726-21-3  
CMF C12 H28 O4 Si3



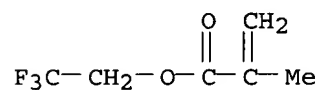
CM 3

CRN 32360-05-7  
CMF C22 H42 O2



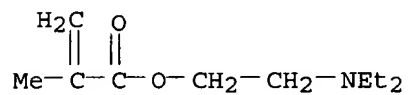
CM 4

CRN 352-87-4  
CMF C6 H7 F3 O2



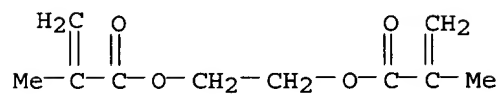
CM 5

CRN 105-16-8  
CMF C10 H19 N O2



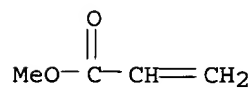
CM 6

CRN 97-90-5  
CMF C10 H14 O4



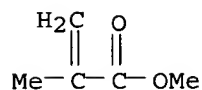
CM 7

CRN 96-33-3  
CMF C4 H6 O2



CM 8

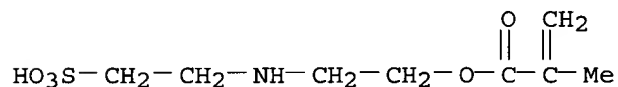
CRN 80-62-6  
CMF C5 H8 O2



RN 483343-51-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 1-methyl-1,2-ethanediyl ester, polymer with  
2,3-bis[(trimethylsilyl)oxy]propyl 2-methyl-2-propenoate,  
2-(diethylamino)ethyl 2-methyl-2-propenoate, hexadecyl  
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate  
and 2-[(2-sulfoethyl)amino]ethyl 2-methyl-2-propenoate, graft (9CI) (CA  
INDEX NAME)

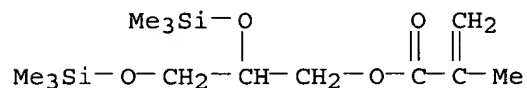
CM 1

CRN 308338-77-4  
CMF C8 H15 N O5 S



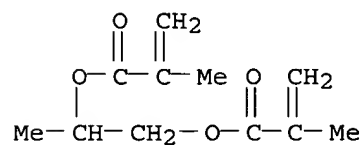
CM 2

CRN 143987-99-9  
CMF C13 H28 O4 Si2



CM 3

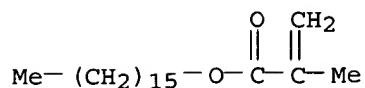
CRN 7559-82-2  
CMF C11 H16 O4



CM 4

CRN 2495-27-4  
CMF C20 H38 O2

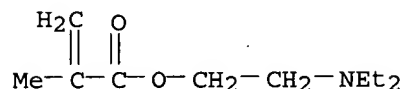




CM 5

CRN 105-16-8

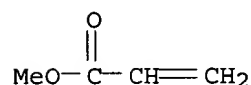
CMF C10 H19 N O2



CM 6

CRN 96-33-3

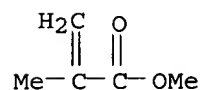
CMF C4 H6 O2



CM 7

CRN 80-62-6

CMF C5 H8 O2



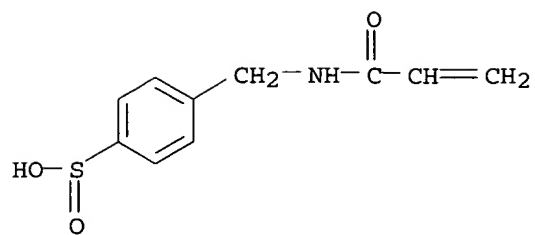
RN 483343-54-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with diethenylbenzene, 3-[1,1,3,5,5,5-hexamethyl-3-(2,2,2-trifluoroethyl)trisiloxanyl]propyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate, octadecyl 2-methyl-2-propenoate and 4-[[[(1-oxo-2-propenyl)amino]methyl]benzenesulfinic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 333362-33-7

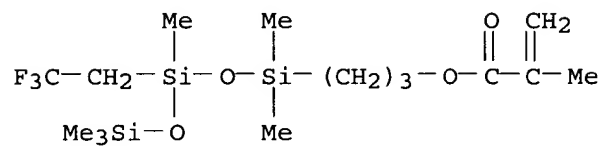
CMF C10 H11 N O3 S



CM 2

CRN 308278-77-5

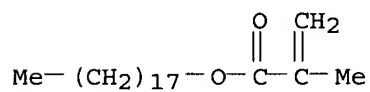
CMF C15 H31 F3 O4 Si3



CM 3

CRN 32360-05-7

CMF C22 H42 O2

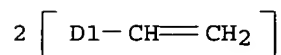


CM 4

CRN 1321-74-0

CMF C10 H10

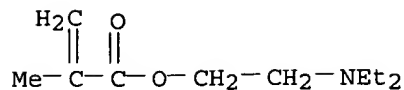
CCI IDS



CM 5

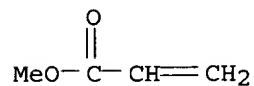
CRN 105-16-8

CMF C10 H19 N O2



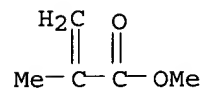
CM 6

CRN 96-33-3  
CMF C4 H6 O2



CM 7

CRN 80-62-6  
CMF C5 H8 O2

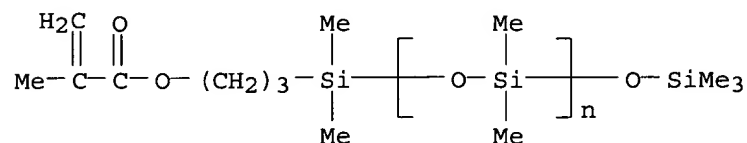


RN 483343-65-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[(trimethylsilyl)oxy]poly[oxy(dimethylsilylene)] and ethene, graft (9CI) (CA INDEX NAME)

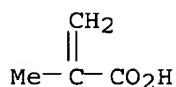
CM 1

CRN 123109-42-2  
CMF (C2 H6 O Si)<sub>n</sub> C12 H26 O3 Si2  
CCI PMS



CM 2

CRN 79-41-4  
CMF C4 H6 O2



CM 3

CRN 74-85-1

CMF C2 H4



L26 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:76189 HCAPLUS

DOCUMENT NUMBER: 134:318489

TITLE: The photochemistry of palladium acetate-bisazide-systems adaptable for fully additive metal deposition on polymers

AUTHOR(S): Stolle, Th.; Schwencke, B.; Franzke, M. K. H.; Halser, K.

CORPORATE SOURCE: FhG-IZM, Berlin, D 13355, Germany

SOURCE: Journal of Information Recording (2000), 25(3-4), 465-479

CODEN: JIREFL; ISSN: 1025-6008

PUBLISHER: Gordon &amp; Breach Science Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The photodecompn. of palladium acetate/bis-(4-azidobenzylidene)-4-methylcyclohexanone mixts. has been investigated in solid layers in relation to seed layer generation for selective metal deposition on different basic layers. The photoreaction at 366-405 nm results in an immobilization of Pd<sup>2+</sup> in a partially crosslinked organic material. After development and chemical reduction of Pd<sup>2+</sup> to Pd<sup>0</sup> the layers become catalytically active for electroless metal deposition. The catalytic activity is influenced by the surface of the applied basic material, however. The photochem. reaction is investigated by XPS, UV-Vis and FTIR-spectrometry. After development of the exposed layers, a loss of 70% to 80% of the material was found. As verified by FTIR, the remaining crosslinked material contains acetate groups. This is only one of the conditions to fix the Pd<sup>2+</sup> in the network. The expected content of amine-N could not be proved in a very convincing way by FTIR, but the detection of N succeeded by XPS. The kind of chemical linkage of N (amine type, azo- or azomethine types) is discussed to be the reason to receive differences in the chemisorption capacity of the network to fix the Pd<sup>2+</sup>. So, depending on the surface properties of the basic layer, some of the seed layers show a typical red-shifted UV-absorption due to an azo- or azomethine content. After development these seed layers do not contain Pd<sup>2+</sup> anymore, hence they show no catalytic activity.

IT 124221-30-3

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(surface layer; photolysis of palladium acetate/bis((azidobenzylidene)methylcyclohexanone mixts in relation to seed layer generation for electroless metal deposition)

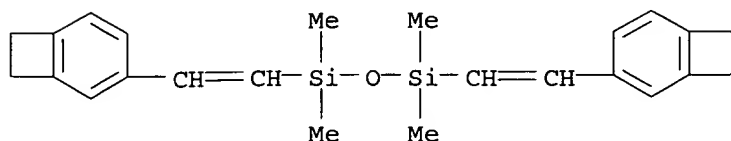
RN 124221-30-3 HCAPLUS

CN Disiloxane, 1,3-bis(2-bicyclo[4.2.0]octa-1,3,5-trien-3-ylethenyl)-1,1,3,3-tetramethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 117732-87-3

CMF C24 H30 O Si2



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:2634 HCAPLUS

DOCUMENT NUMBER: 136:294657

TITLE: Detection of 9,12-dioxo-10(Z)-dodecenoic acid, a new fatty acid metabolite derived from 13-hydroperoxy-9,11-octadecadienoic acid in lentil seed. [Erratum to document cited in CA134:4780]

AUTHOR(S): Gallasch, Bernd A. W.; Spiteller, Gerhard

CORPORATE SOURCE: Organische Chemie I, Universitat Bayreuth, Bayreuth, 95440, Germany

SOURCE: Lipids (2000), 35(11), 1300

CODEN: LPDSAP; ISSN: 0024-4201

PUBLISHER: AOCs Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In the paper, the precursor of 9,12-dioxo-dodecadienoic acid was assumed to be 9-hydroxy-12-oxo-dodecenoic acid. Since this acid is derived from 13-hydroperoxy-9,11-octadecadienoic acid (13-HPODE), the title is changed to "Detection of 9,12-dioxo-10(Z)-dodecenoic Acid, a New Fatty Acid Metabolite Derived from 13-Hydroperoxy-9,11-octadecadienoic Acid in Lentil Seed (*Lens culinaris* Medik.)". As 2,4-decadienal is cleaved by stirring under an air atmosphere at 37°C to hexanal and 2-butenedial, 9,12-dioxo-10-dodecenoic acid should generate in a similar reaction 9-oxo-10,12-octadecadienoic acid. This compound is derived from 9-hydroperoxy-10,12-octadecadienoic acid (9-HPODE). Therefore, it remains an open question whether 9-oxo-10,12-oxodecadienoic acid is generated from 13-HPODE via 13-hydroxy-10,12-octadecadienoic acid or 9-HPODE via 9-oxo-10,12-octadecadienoic acid.

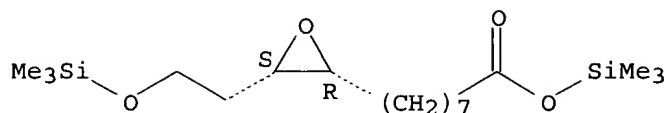
IT 308320-73-2P 308320-75-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (detection of 9,12-dioxo-10(Z)-dodecenoic acid as new fatty acid metabolite derived from 13-hydroperoxy-9,11-octadecadienoic acid in lentil seed flour (Erratum))

RN 308320-73-2 HCAPLUS

CN Oxiraneoctanoic acid, 3-[2-[(trimethylsilyl)oxy]ethyl]-, trimethylsilyl ester, (2R,3S)-rel- (9CI) (CA INDEX NAME)

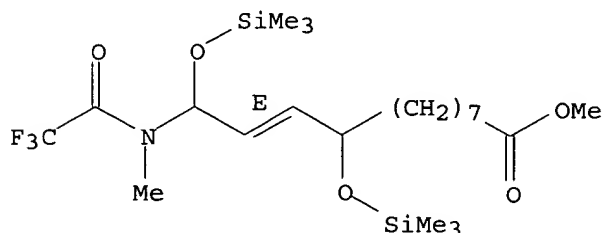
Relative stereochemistry.



RN 308320-75-4 HCAPLUS

CN 10-Dodecenoic acid, 12-[methyl(trifluoroacetyl)amino]-9,12-bis[(trimethylsilyl)oxy]-, methyl ester, (10E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L26 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:710573 HCAPLUS

DOCUMENT NUMBER: 134:4780

TITLE: Synthesis of 9,12-dioxo-10(Z)-dodecenoic acid, a new fatty acid metabolite derived from 9-hydroperoxy-10,12-octadecadienoic acid in lentil seed (*Lens culinaris* Medik.)

AUTHOR(S): Gallasch, Bernd A. W.; Spiteller, Gerhard

CORPORATE SOURCE: Organische Chemie I, Universitat Bayreuth, Bayreuth, 95440, Germany

SOURCE: *Lipids* (2000), 35(9), 953-960  
CODEN: LPDSAP; ISSN: 0024-4201

PUBLISHER: AOCS Press

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:4780

AB The previously unknown linoleic acid peroxidn. product 9,12-dioxo-10(Z)-dodecenoic acid (I) was detected in lentil seed flour (*Lens culinaris* Medik.) by electron impact mass spectrometry (EI-MS) after derivatization with pentafluorobenzyl-hydroxylamine-hydrochloride, methylation of acidic groups with diazomethane, and protection of hydroxylic groups with N-methyl-N-trimethylsilyl-trifluoroacetamide. The structure of the natural product was confirmed by synthesis of I, 9,12-dioxo-10(E)-dodecenoic acid, and derivs. EI-MS, NMR and gas chromatog. data of these compds. and synthetic intermediates are discussed.

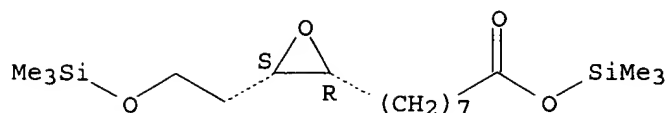
IT 308320-73-2P 308320-75-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis of 9,12-dioxo-10(Z)-dodecenoic acid, a new fatty acid metabolite derived from 9-hydroperoxy-10,12-octadecadienoic acid in lentil seed flour)

RN 308320-73-2 HCAPLUS

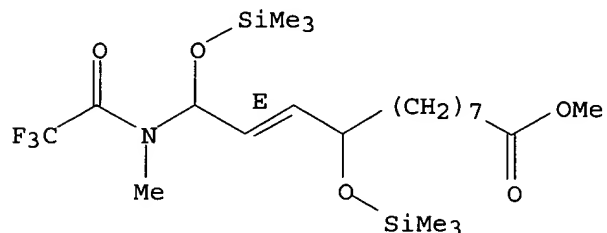
CN Oxiraneoctanoic acid, 3-[2-[(trimethylsilyl)oxy]ethyl]-, trimethylsilyl ester, (2R,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



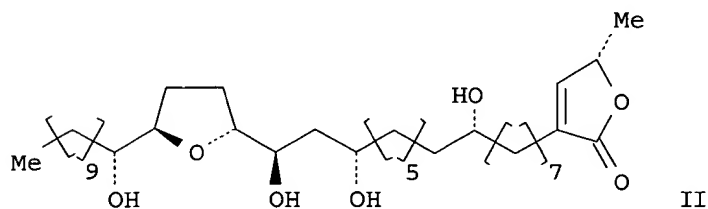
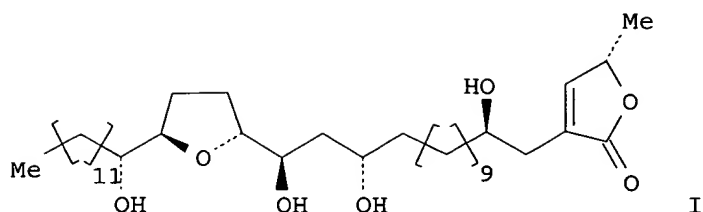
RN 308320-75-4 HCAPLUS  
 CN 10-Dodecenoic acid, 12-[methyl(trifluoroacetyl)amino]-9,12-bis[(trimethylsilyl)oxy]-, methyl ester, (10E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:125877 HCAPLUS  
 DOCUMENT NUMBER: 132:248567  
 TITLE: Asitribolins C and D: two new cytotoxic mono-tetrahydrofuran annonaceous acetogenins from Asimina triloba seeds  
 AUTHOR(S): Woo, Mi-Hee; Chung, Soon-Ok; Kim, Dal-Hwan  
 CORPORATE SOURCE: Department of Pharmacy, College of Pharmacy, Catholic University of Taegu-Hyosung, Kyongsan, 712-702, S. Korea  
 SOURCE: Bioorganic & Medicinal Chemistry (2000), 8(1), 285-290  
 CODEN: BMECEP; ISSN: 0968-0896  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Two new bioactive mono-tetrahydrofuran (THF)  $\gamma$ -lactone acetogenins, asitrilobins C (I) and D (II), were isolated from the seeds of *Asimina triloba* (Annonaceae) by directing the fractionation with brine shrimp lethality. I and II have a relative stereochem. relationship of threo/trans/threo across the mono-THF ring with its two flanking hydroxyls. Their structures were established on the basis of chemical and spectral evidence. I and II showed selective cytotoxicity comparable with adriamycin for the breast carcinoma (MCF-7) and the colon adenocarcinoma (HT-29) cell lines.

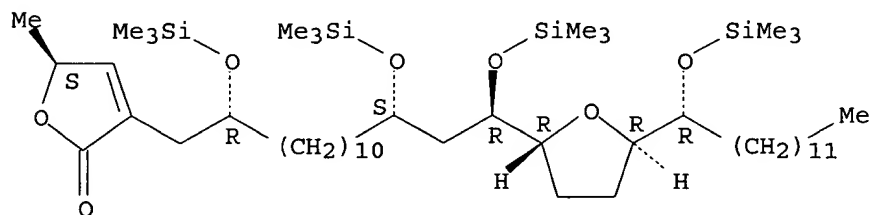
IT 262289-06-5P 262289-14-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(asitrilobins C and D, two new cytotoxic mono-tetrahydrofuran  
annonaceous acetogenins from *Asimina triloba* seeds)

RN 262289-06-5 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(2R,13S,15R)-15-[(2R,5R)-tetrahydro-5-[(1R)-1-[(trimethylsilyl)oxy]tridecyl]-2-furanyl]-2,13,15-tris[(trimethylsilyl)oxy]pentadecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

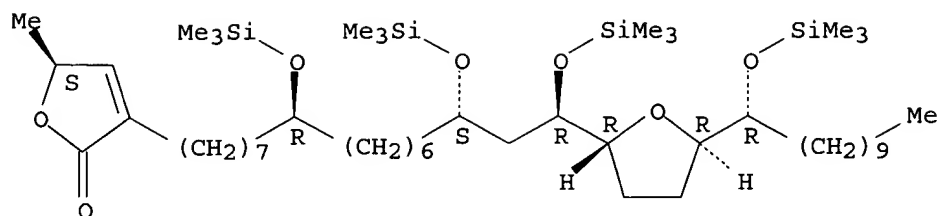


RN 262289-14-5 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(8R,15S,17R)-17-[(2R,5R)-tetrahydro-5-[(1R)-1-[(trimethylsilyl)oxy]undecyl]-2-furanyl]-8,15,17-tris[(trimethylsilyl)oxy]heptadecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:730818 HCAPLUS

DOCUMENT NUMBER: 132:76062

TITLE: Corrosolin and compound-2: cytotoxic Annonaceous acetogenins from the seeds of Annona cherimolia

AUTHOR(S): Kim, Dal-Hwan; Woo, Mi-Hee

CORPORATE SOURCE: College of Pharmacy, Catholic University of Taegu-Hyosung, Kyongsan, 712-702, S. Korea

SOURCE: Yakhak Hoechi (1999), 43(5), 584-590

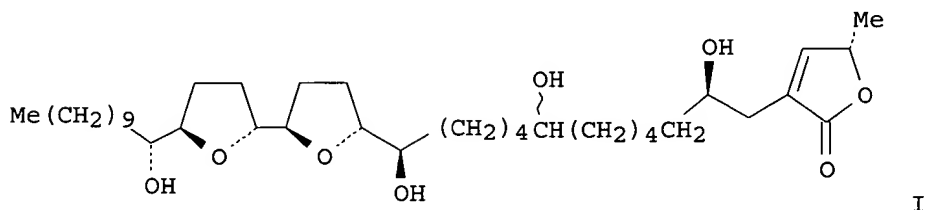
CODEN: YAHOA3; ISSN: 0513-4234

PUBLISHER: Pharmaceutical Society of Korea

DOCUMENT TYPE: Journal

LANGUAGE: Korean

GI



I

AB Bioactivity-directed fractionation from the seeds of Annona cherimolia resulted in the isolation of two known cytotoxic compds.: corrosolin and I. The structures of these compds. were characterized on the basis of chemical and spectral data. Corrosolin has a relative stereochem. relationship of threo/trans/threo for the mono-tetrahydrofuran (THF) ring with two flanking hydroxyls, from C-15 to C-20, which is the annonacin type. I has a relative stereochem. relationship of threo/trans/threo/trans/threo for the adjacent bis-THF ring with two flanking hydroxyls, such as in the asimicin type. The absolute configurations of carbinol carbons in corrosolin were determined as 10R, 15R, and 20R by anal. of its Mosher ester derivs. Corrosolin and I are known, but are first isolated from this plant.

IT 253872-75-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(isolation of corrosolin and asimicin-type Annonaceous acetogenins from the seeds of Annona)

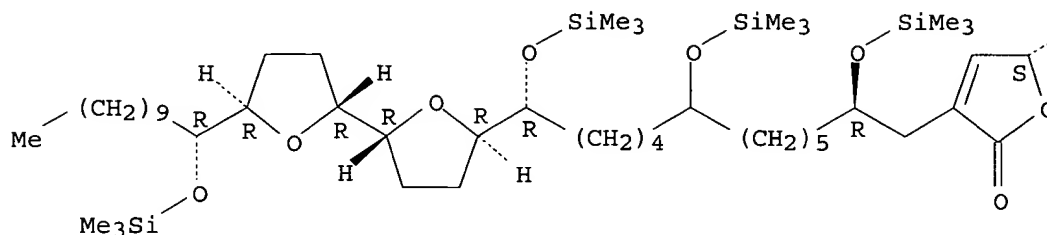
RN 253872-75-2 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(2R,13R)-13-[(2R,2'R,5R,5'R)-octahydro-5'-[(1R)-1-[(trimethylsilyl)oxy]undecyl][2,2'-bifuran]-5-yl]-2,8,13-

tris[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

Me

IT 253872-74-1P

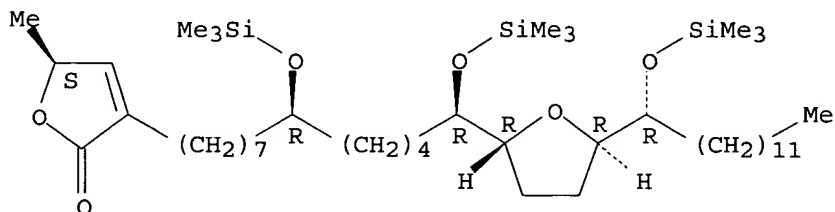
RL: SPN (Synthetic preparation); PREP (Preparation)

(isolation of corrosolin and asimicin-type Annonaceous acetogenins from the seeds of Annona)

RN 253872-74-1 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(8R,13R)-13-[(2R,5R)-tetrahydro-5-[(1R)-1-[(trimethylsilyl)oxy]tridecyl]-2-furanyl]-8,13-bis[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:530879 HCAPLUS

DOCUMENT NUMBER: 131:174814

TITLE: Hair conditioners containing Avena sativa seed extracts and high-molecular-weight polysiloxanes

INVENTOR(S): Omura, Takayuki; Kimura, Ayumi

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

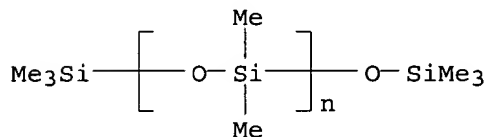
KIND

DATE

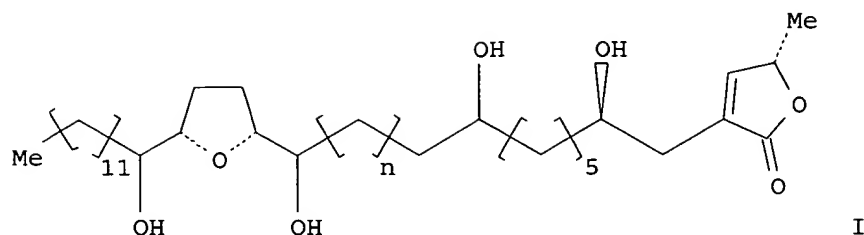
APPLICATION NO.

DATE

JP 11228353 A2 19990824 JP 1998-42916 19980209  
 PRIORITY APPLN. INFO.: JP 1998-42916 19980209  
 AB The hair conditioners, which give gloss and smoothness to hair and repair split hairs, contain exts. of *A. sativa* seed or oatmeal with H<sub>2</sub>O and/or water-soluble organic solvents and  $\geq 1$  selected from R<sub>2</sub>SiR<sub>1</sub>2O(SiR<sub>1</sub>2O)<sub>n</sub>SiR<sub>1</sub>2R<sub>2</sub> (R<sub>1</sub> = Me or Me/Ph; R<sub>2</sub> = Me, OH; n = 3000-20,000) and R<sub>4</sub>SiR<sub>3</sub>2(R<sub>3</sub>2SiO)<sub>x</sub>(SiR<sub>3</sub>R<sub>5</sub>O)<sub>y</sub>SiR<sub>3</sub>2R<sub>4</sub> [I; R<sub>3</sub> = Me or Me/Ph; R<sub>4</sub> = Me, OH, any group given for R<sub>5</sub>; R<sub>5</sub> = R<sub>6</sub>Z [R<sub>6</sub> = C<sub>3</sub>-6 alkylene; Z = NR<sub>7</sub>2, N+R<sub>7</sub>3A-, NR<sub>7</sub>(CH<sub>2</sub>)<sub>a</sub>NR<sub>7</sub>2, NR<sub>7</sub>(CH<sub>2</sub>)<sub>a</sub>N+R<sub>7</sub>3A-, NR<sub>7</sub>(CH<sub>2</sub>)<sub>a</sub>NR<sub>7</sub>COR<sub>8</sub>; R<sub>7</sub> = H, C<sub>1</sub>-4 alkyl; R<sub>8</sub> = C<sub>1</sub>-4 alkyl; A = Cl, Br, I; a = 2-6]; x, y = integer; x + y = 3000-20,000; y/x = 1/500-1/1000]. A hair mousse containing octamethylcyclotetrasiloxane 1.0, I [R<sub>3</sub> = R<sub>4</sub> = Me, R<sub>5</sub> = (CH<sub>2</sub>)<sub>3</sub>NMe(CH<sub>2</sub>)<sub>2</sub>NMe<sub>2</sub>, x = 10,000; yr = 5] 2.0, glycerin 1.0, polyoxyethylene hydrogenated castor oil esters 2.0, H. C Polymer 1 (vinylpyrrolidone-diethylaminoethyl methacrylate copolymer di-Et sulfate) 3.0, EtOH 10.0, H<sub>2</sub>O 45.0, butane 7.0, extract of oatmeal with H<sub>2</sub>O/1,3-butylene glycol 20.0%, and perfume was prepared  
 IT 42557-10-8, Dimethylsilanediol homopolymer, sru, trimethylsilyl-terminated  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hair conditioners containing exts. of *Avena sativa* seed or oatmeal and high-mol.-weight (amino- or ammonium-containing) polysiloxanes)  
 RN 42557-10-8 HCAPLUS  
 CN Poly[oxy(dimethylsilylene)],  $\alpha$ -(trimethylsilyl)- $\omega$ -[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



L26 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:244277 HCAPLUS  
 DOCUMENT NUMBER: 131:56432  
 TITLE: Asitrilobins A and B: cytotoxic mono-THF Annonaceous acetogenins from the seeds of *Asimina triloba*  
 AUTHOR(S): Woo, Mi-Hee; Kim, Dal-Hwan; McLaughlin, Jerry L.  
 CORPORATE SOURCE: Department of Pharmacy, College of Pharmacy, Catholic University of Taegu-Hyosung, Kyongsan, 712-702, S. Korea  
 SOURCE: Phytochemistry (1999), 50(6), 1033-1040  
 CODEN: PYTCAS; ISSN: 0031-9422  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The seeds of *Asimina triloba* have yielded two novel cytotoxic mono-tetrahydrofuran (THF) Annonaceous acetogenins, asitrilobins A and B (I,  $n = 5, 3$ ). In addition, annonacin, asimn and asimnacin, which are known, and annomontacin and xylomaticin, which are known but are new in this species, were obtained. I have a relative stereochem. relationship of erythro/cis/threo across the mono-THF ring with its two flanking hydroxyls and they, thus, represent a new type of acetogenin. Their structures were established on the basis of chemical and spectral evidence. I showed potent bioactivities in the brine shrimp lethality test (BST) and among six human solid tumor cell lines with notable selectivity for the pancreatic cell line (MIA PaCa-2) at ten to one-hundred times the potency of adriamycin.

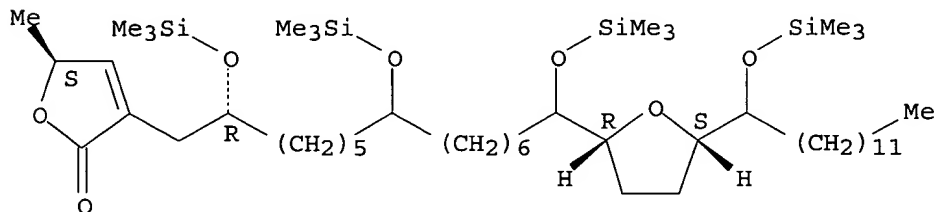
IT 227202-71-3P 227202-74-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (isolation, structure and antitumor activity of asitrilobins A and B, cytotoxic mono-THF Annonaceous acetogenins, from the **seeds** of *Asimina triloba*)

RN 227202-71-3 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(2R)-15-[(2R,5S)-tetrahydro-5-[1-[(trimethylsilyl)oxy]tridecyl]-2-furanyl]-2,8,15-tris[(trimethylsilyl)oxy]pentadecyl]-, (5S)- (9CI) (CA INDEX NAME)

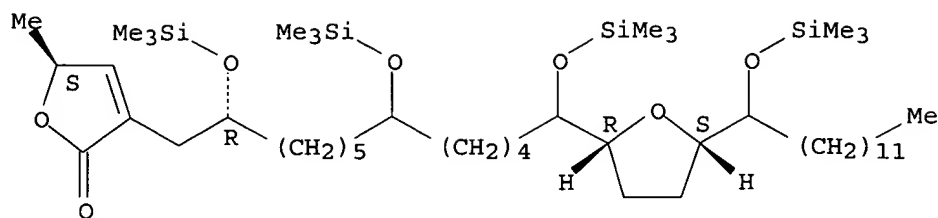
Absolute stereochemistry.  
Currently available stereo shown.



RN 227202-74-6 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(2R)-13-[(2R,5S)-tetrahydro-5-[1-[(trimethylsilyl)oxy]tridecyl]-2-furanyl]-2,8,13-tris[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Currently available stereo shown.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:227396 HCAPLUS

DOCUMENT NUMBER: 131:42052

TITLE: Chemical studies on mexican plants used in traditional medicine. 36. Purpuracenin: a new cytotoxic adjacent bis-tetrahydrofuran annonaceous acetogenin from the seeds of Annona purpurea

AUTHOR(S): Chavez, Daniel; Mata, Rachel

CORPORATE SOURCE: Departamento de Farmacia, Facultad de Quimica and Unidad de Investigacion en Plantas Medicinales, Instituto de Quimica, Universidad Nacional Autonoma de Mexico, Coyoacan, 04510, Mex.

SOURCE: Phytochemistry (1999), 50(5), 823-828

CODEN: PYTCAS; ISSN: 0031-9422

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Purpuracenin, a novel cytotoxic acetogenin and annoglauicin, a known compound, were isolated from the seeds of Annona purpurea. Their structures were elucidated by a combination of chemical and spectral methods including MS and NMR spectral measurements. The absolute configurations of both compds. were presented. The new compound and annoglauicin exhibited potent cytotoxic activity in vitro against six human solid tumor cell lines.

IT 164595-20-4P 227030-91-3P

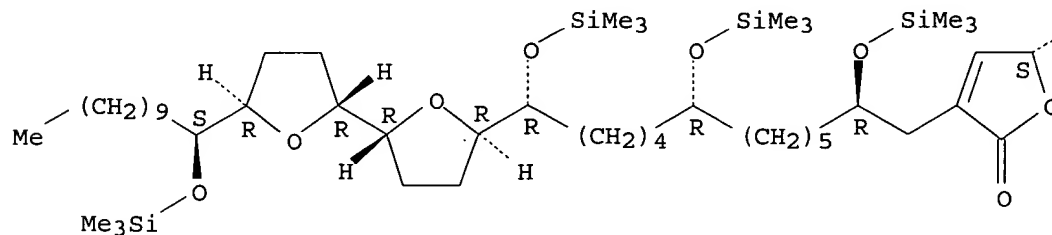
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (isolation, antitumor activity, and mol. structure of purpuracenin and annoglauicin, acetogenins from the **seeds** of Annona purpurea)

RN 164595-20-4 HCAPLUS

CN 2(5H)-Furanone, 5-methyl-3-[(2R,8R,13R)-13-[(2R,2'R,5R,5'R)-octahydro-5'-[(1S)-1-[(trimethylsilyl)oxy]undecyl][2,2'-bifuran]-5-yl]-2,8,13-tris[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

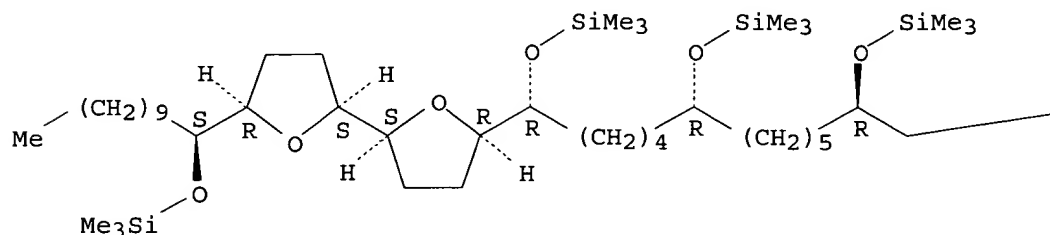
Me

RN 227030-91-3 HCAPLUS

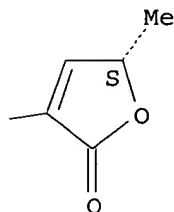
CN 2 (5H)-Furanone, 5-methyl-3-[(2R,8R,13R)-13-[(2S,2'S,5R,5'R)-octahydro-5'-  
 [(1S)-1-[(trimethylsilyl)oxy]undecyl][2,2'-bifuran]-5-yl]-2,8,13-  
 tris[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:65160 HCAPLUS

DOCUMENT NUMBER: 130:183516

TITLE: Heat-resistant poly(ethylene 2,6-naphthalate) films  
 coated with composite particles containing  
 polysiloxanes for release films with improved adhesion  
 of the base films to silicones and manufacture thereof

INVENTOR(S): Ishikawa, Toshifumi; Fukuda, Masayuki

PATENT ASSIGNEE(S): Teijin Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11020086	A2	19990126	JP 1997-181098	19970707
PRIORITY APPLN. INFO.:			JP 1997-181098	19970707

AB The dimensionally stable poly(ethylene 2,6-naphthalate) (I) films are prepared by coating  $\geq 1$  side of I films with composite polymer particles comprising polymer seeds showing continuous phase in single particle and polysiloxanes coexisting with the polymer seeds, drying the films, and heat-crosslinking the polysiloxanes to form a primer layer and give films exhibiting shrinkage in the machine direction 0-0.10% and shrinkage in the transverse direction 0-0.05% on heat-treating the coated films for 30 min at 120°. I was extruded on a drum to form a film, drawn in the machine direction, coated with an aqueous solution containing

MeSi(OMe)<sub>3</sub>

91, AE 316 (acrylate ester copolymer latex) 9, and surfactant 12%, drawn in the transverse direction, and heat-treated at 240° to give a biaxially drawn film having a primer layer. The film was coated on the primer layer with KS 722 (silicone) and cured to give a release film exhibiting dimensional change 0.05 and 0.00%, resp., in the machine and transverse directions on heating the film from room temperature to 120° and showing good release properties.

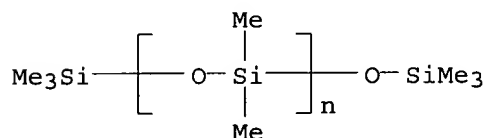
IT 42557-10-8

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(release coating; heat-resistant poly(ethylene 2,6-naphthalate) films coated with composite particles containing polysiloxanes and polymer seeds for release films with improved adhesion of the base films to silicones)

RN 42557-10-8 HCAPLUS

CN Poly[oxy(dimethylsilylene)],  $\alpha$ -(trimethylsilyl)- $\omega$ -[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



L26 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:499289 HCAPLUS

DOCUMENT NUMBER: 129:211246

TITLE: 10-Oximeganacone, the First Nitrogenated Acetogenin Derivative Found To Be a Potent Inhibitor of Mitochondrial Complex I

AUTHOR(S): Gallardo, Teresa; Saez, Jairo; Granados, Hillmer; Tormo, Jose R.; Velez, Ivan D.; Brun, Nestor; Torres, Beatriz; Cortes, Diego

CORPORATE SOURCE: Departamento de Farmacologia Farmacognosia y Farmacodinamia Facultad de Farmacia, Universidad de Valencia, Burjassot, 46100, Spain

SOURCE: Journal of Natural Products (1998), 61(8), 1001-1005 CODEN: JNPRDF; ISSN: 0163-3864

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A new 10-keto bis-tetrahydrofuran acetogenin, guanacone, has been isolated from a cytotoxic extract of Annona aff. spraguei seeds. The 10-oximeganacone derivative is the first bioactive nitrogenated acetogenin a very potent inhibitor of mammalian electron transport chain complex I. In addition, a structure-activity (SAR) study of guanacone analogs is reported based on the titration of the NADH oxidase and NADH:ubiquinone oxidoreductase

activities.

IT 212575-94-5P

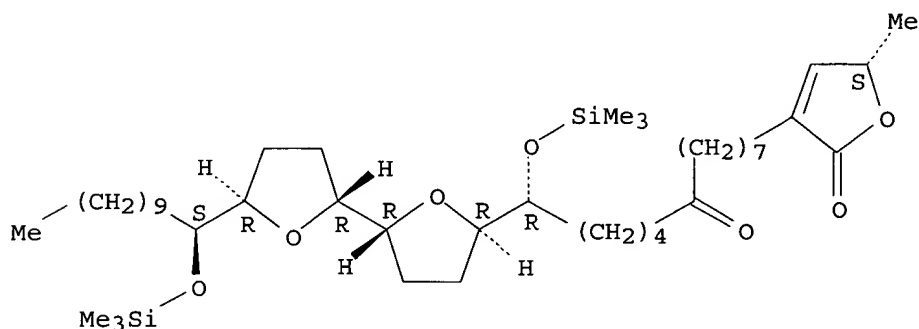
RL: SPN (Synthetic preparation); PREP (Preparation)

(10-oximeganacone as first nitrogenated acetogenin derivative found to be a potent inhibitor of mitochondrial complex I and isolation of guanacone from *Annona spraguei* seeds)

RN 212575-94-5 HCAPLUS

CN 2 (5H)-Furanone, 5-methyl-3-[(13R)-13-[(2R,2'R,5R,5'R)-octahydro-5'-[(1S)-1-[(trimethylsilyl)oxy]undecyl][2,2'-bifuran]-5-yl]-8-oxo-13-[(trimethylsilyl)oxy]tridecyl]-, (5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:342663 HCAPLUS

DOCUMENT NUMBER: 129:95625

TITLE: Synthesis of 9-deoxy-15-hydroxycotylenol and its germination-stimulating activity on lettuce seeds

AUTHOR(S): Kato, Nobuo; Li, Feng; Mori, Akira; Takeshita, Hitoshi

CORPORATE SOURCE: Institute Advanced Material Study, Kyushu University, Kasuga, 816, Japan

SOURCE: Bulletin of the Chemical Society of Japan (1998), 71(5), 1171-1180

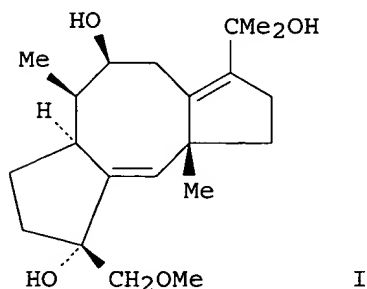
CODEN: BCSJA8; ISSN: 0009-2673

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

GI





AB Cotylenins and fusicoccins, fungal diterpenoid glycosides, are known to have identical, yet unique, plant growth-regulating activities. These compds. widen the stomatal pore, stimulate cell enlargement, break seed dormancy, and stimulate rhizogenesis. Fusicocin has been widely utilized in plant physiol because of these plant-hormone like activities. 9-Deoxy-15-hydroxycotylenol (I) and its 15-methoxymethyl ether were synthesized during the structure-activity relationships of this class of compds to clarify the role of the 9 $\alpha$ -hydroxy group of cotylenol, a common aglycon of cotylenins. These cotylenol analogs retained germination-stimulating activity on lettuce seeds and clarified that the 9 $\alpha$ -hydroxy group of cotylenol is not essential for its biol. activities. This information is useful when designing tools for targeting the 14-3-3 protein, which was recently identified as the binding protein of fusicocin.

IT 200343-05-1P 209622-08-2P 209622-13-9P

209622-14-0P 209622-16-2P

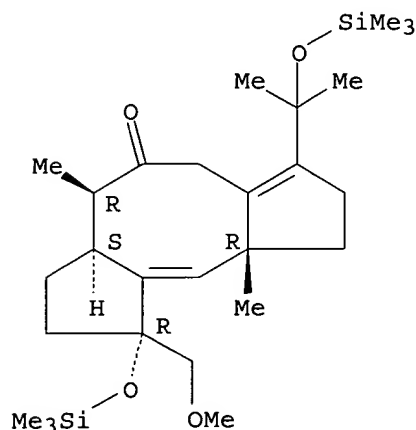
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 9-deoxy-15-hydroxycotylenol and its germination-stimulating activity on lettuce **seeds**)

RN 200343-05-1 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5(1H)-one, 2,3,3a,4,6,8,9,9a-octahydro-1-(methoxymethyl)-4,9a-dimethyl-7-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-1-[(trimethylsilyl)oxy]-, (1R,3aS,4R,9aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

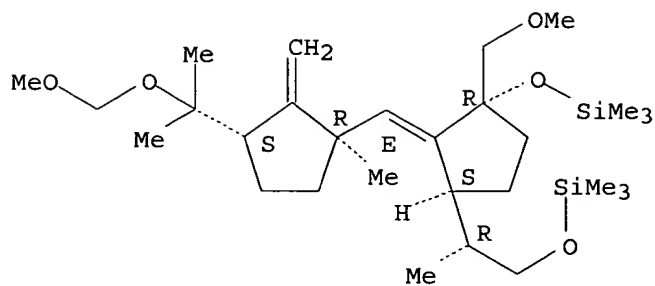


RN 209622-08-2 HCAPLUS

CN Silane, [[(1R,2E,3S)-2-[[[(1R,3S)-3-[1-(methoxymethoxy)-1-methylethyl]-1-methyl-2-methylenecyclopentyl]methylene]-1-(methoxymethyl)-3-[(1R)-1-methyl-2-[(trimethylsilyl)oxy]ethyl]cyclopentyl]oxy]trimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

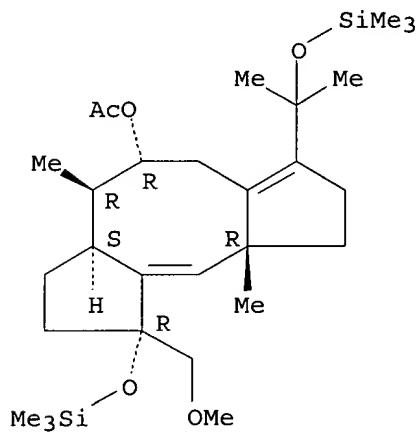
Double bond geometry as shown.



RN 209622-13-9 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5-ol, 1,2,3,3a,4,5,6,8,9,9a-decahydro-1-(methoxymethyl)-4,9a-dimethyl-7-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-1-[(trimethylsilyl)oxy]-, acetate, (1R,3aS,4R,5R,9aR)- (9CI) (CA INDEX NAME)

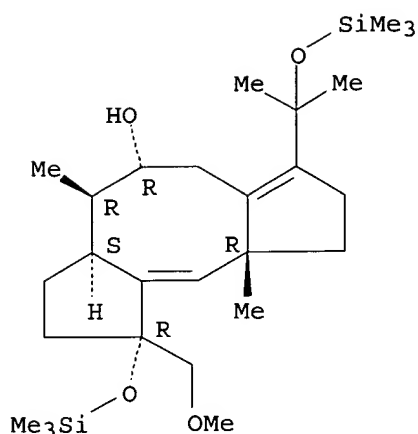
Absolute stereochemistry. Rotation (-).



RN 209622-14-0 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5-ol, 1,2,3,3a,4,5,6,8,9,9a-decahydro-1-(methoxymethyl)-4,9a-dimethyl-7-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-1-[(trimethylsilyl)oxy]-, (1R,3aS,4R,5R,9aR)- (9CI) (CA INDEX NAME)

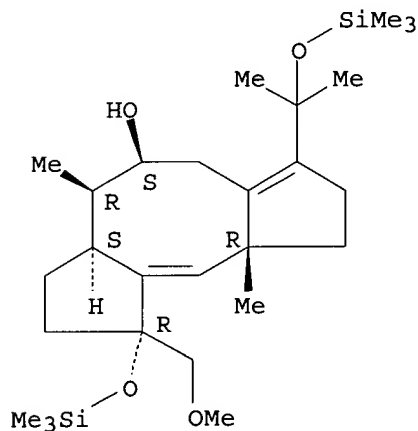
Absolute stereochemistry. Rotation (+).



RN 209622-16-2 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5-ol, 1,2,3,3a,4,5,6,8,9,9a-decahydro-1-(methoxymethyl)-4,9a-dimethyl-7-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-1-[(trimethylsilyl)oxy]-, (1R,3aS,4R,5S,9aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



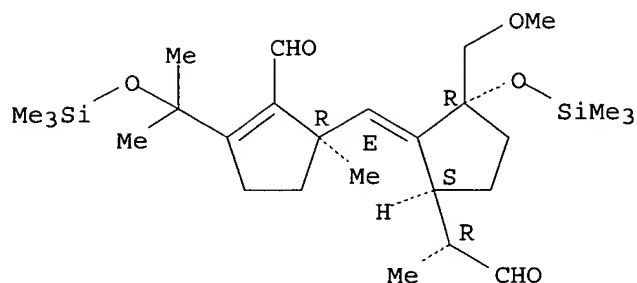
IT 209622-15-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of 9-deoxy-15-hydroxycotylenol and its germination-stimulating activity on lettuce **seeds**)

RN 209622-15-1 HCAPLUS

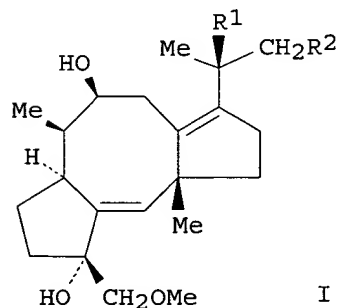
CN 1-Cyclopentene-1-carboxaldehyde, 5-[(E)-[(2R,5S)-2-(methoxymethyl)-5-[(1R)-1-methyl-2-oxoethyl]-2-[(trimethylsilyl)oxy]cyclopentylidene)methyl]-5-methyl-2-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-, (5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:800915 HCAPLUS  
 DOCUMENT NUMBER: 128:61649  
 TITLE: Synthesis of 9-deoxycotylenol derivatives and their seed germination-stimulating activity  
 AUTHOR(S): Li, Feng; Kato, Nobuo; Mori, Akira; Takeshita, Hitoshi; Sassa, Takeshi  
 CORPORATE SOURCE: Institute of Advanced Material Study, Kyushu University, Fukuoka, 816, Japan  
 SOURCE: Chemistry Letters (1997), (12), 1207-1208  
 CODEN: CMLTAG; ISSN: 0366-7022  
 PUBLISHER: Chemical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 128:61649  
 GI

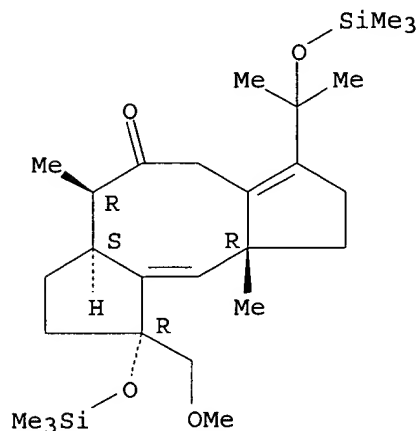


AB 9-Deoxy-15-methoxymethoxycotylenol (I; R1 = OCH2OMe; R1 = H) and 9-deoxy-19-methoxymethoxycotylenol (I; R1 = H, R2 = OCH2OMe) were synthesized to clarify a role of the 9 $\alpha$ -hydroxyl of cotylenol, a common aglycon of cotylenins possessing potent plant growth-regulating activities. Both of the 9-deoxycotylenol derivs. stimulated germination of lettuce seeds and therefore it has been clarified that the 9 $\alpha$ -hydroxyl of cotylenol is not essential for the biol. activities.  
 IT 200343-05-1P 200343-12-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of 9-deoxycotylenol derivs. and their seed germination-stimulating activity)

RN 200343-05-1 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5(1H)-one, 2,3,3a,4,6,8,9,9a-octahydro-1-(methoxymethyl)-4,9a-dimethyl-7-[1-methyl-1-[(trimethylsilyl)oxy]ethyl]-1-[(trimethylsilyl)oxy]-, (1R,3aS,4R,9aR)- (9CI) (CA INDEX NAME)

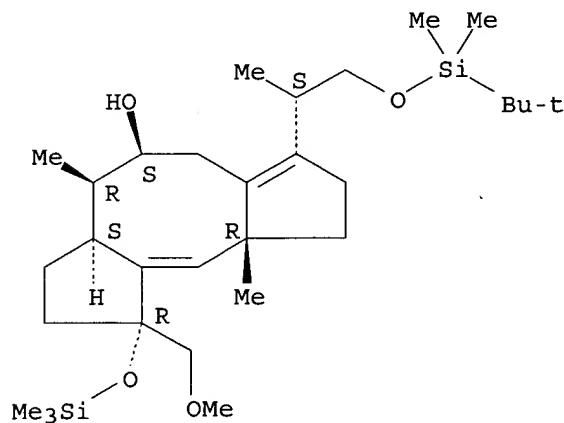
Absolute stereochemistry. Rotation (-).



RN 200343-12-0 HCAPLUS

CN Dicyclopenta[a,d]cycloocten-5-ol, 7-[2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-methylethyl]-1,2,3,3a,4,5,6,8,9,9a-decahydro-1-(methoxymethyl)-4,9a-dimethyl-1-[(trimethylsilyl)oxy]-, [1R-[1 $\alpha$ ,3 $\alpha$ ,4 $\beta$ ,5 $\beta$ ,7(S\*),9 $\alpha$ ]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

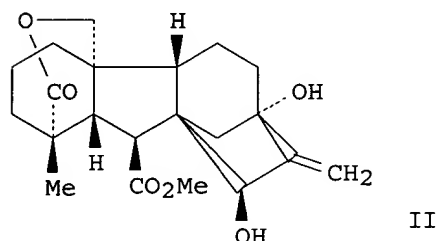
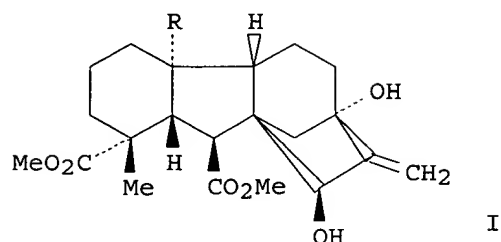
L26 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:390111 HCAPLUS

DOCUMENT NUMBER: 125:143056

TITLE: Synthesis and confirmation of structure of three 13,15 $\beta$ -dihydroxy C-20 gibberellins, GA100, GA101 and GA102, isolated from the seeds of *Helianthus annuus* L

AUTHOR(S): Owen, David J.; Mander, Lewis N.; Gaskin, Paul;  
Macmillan, Jake  
CORPORATE SOURCE: Res. Sch. Chem., Australian Natl. Univ., Canberra,  
2601, Australia  
SOURCE: Phytochemistry (1996), 42(4), 921-925  
CODEN: PYTCAS; ISSN: 0031-9422  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



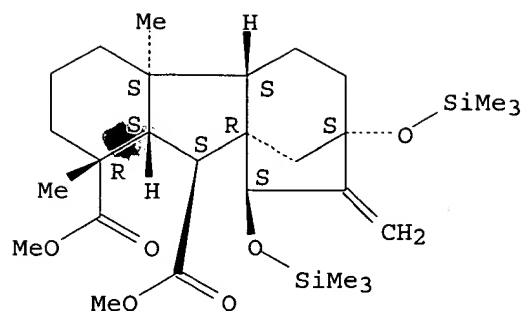
AB The structures of three 13,15 $\beta$ -dihydroxylated C-20 I (R = Me, CHO) and II gibberellins isolated from the seeds of *Helianthus annuus* have been confirmed by partial synthesis of authentic samples from gibberellic acid and GC-mass spectral comparison with the endogenous samples. GC-mass spectra data of trimethylsilyl Me ester derivs. of GA100, GA101 and GA102 and <sup>1</sup>H and <sup>13</sup>C NMR of the Me esters confirms the structures of these 13,15 $\beta$ -dihydroxy C-20 gibberellins.

IT 179936-48-2 179936-49-3 179936-50-6  
179936-51-7  
RL: PRP (Properties)  
(preparation and structure confirmation of the 13,15 $\beta$ -dihydroxy C-20 gibberellins, GA100, GA101 and GA102, isolated from the **seeds** of *Helianthus annuus* L)

RN 179936-48-2 HCAPLUS

CN Gibbane-1,10-dicarboxylic acid, 1,4a-dimethyl-8-methylene-7,9-bis[(trimethylsilyl)oxy]-, dimethyl ester, (1 $\alpha$ ,4 $\alpha$ ,4 $\beta$ ,9 $\beta$ )- (9CI) (CA INDEX NAME)

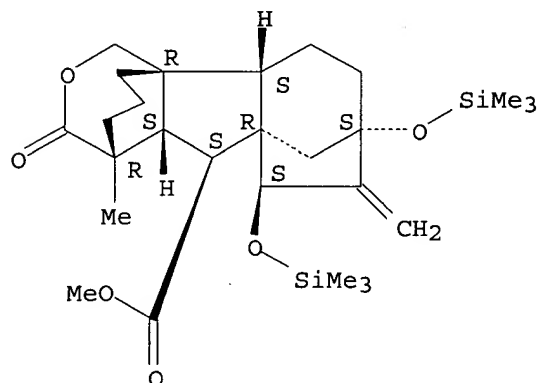
Absolute stereochemistry.



RN 179936-49-3 HCAPLUS

CN Gibbane-1,10-dicarboxylic acid, 4a-(hydroxymethyl)-1-methyl-8-methylene-7,9-bis[(trimethylsilyl)oxy]-, 1,4a-lactone, 10-methyl ester, (1 $\alpha$ ,4 $\alpha$ ,4b $\beta$ ,9 $\beta$ ,10 $\beta$ )- (9CI) (CA INDEX NAME)

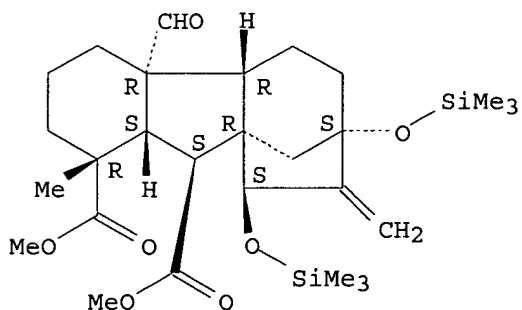
Absolute stereochemistry.



RN 179936-50-6 HCAPLUS

CN Gibbane-1,10-dicarboxylic acid, 4a-formyl-1-methyl-8-methylene-7,9-bis[(trimethylsilyl)oxy]-, dimethyl ester, (1 $\alpha$ ,4 $\alpha$ ,4b $\beta$ ,9 $\beta$ ,10 $\beta$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

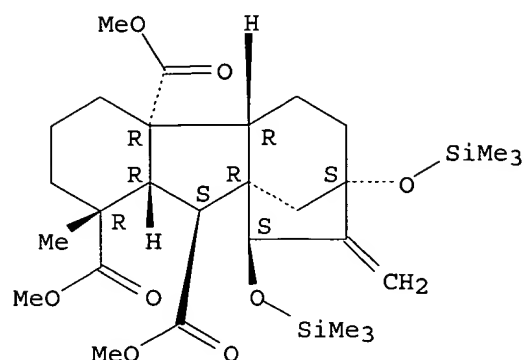


RN 179936-51-7 HCAPLUS

CN Gibbane-1,4a,10-tricarboxylic acid, 1-methyl-8-methylene-7,9-bis[(trimethylsilyl)oxy]-, trimethyl ester, (1 $\alpha$ ,4 $\alpha$ ,4b $\beta$ ,9 $\beta$ ,10 $\beta$ )- (9CI) (CA INDEX NAME)

$\beta,10\beta$  - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L26 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:792014 HCAPLUS

DOCUMENT NUMBER: 123:200233

TITLE: Preparation of core-shell particles consisted of polystyrene-polysiloxane by seed emulsion polymerization

AUTHOR(S): Bai, Ruke; Wang, Mingzhe; He, Weidong; Pan, Caiyuan

CORPORATE SOURCE: Dep. of Materials Science and Engineering, Univ. of Science and Technology of China, Hefei, 230026, Peop. Rep. China

SOURCE: Gongneng Gaofenzi Xuebao (1995), 8(2), 128-34

CODEN: GGXUEH; ISSN: 1004-9843

PUBLISHER: Huadong Huagong Xueyuan Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB The core-shell polymer particles were prepared by the polymerization of styrene in

the presence of polysiloxane seeded latex. The polymerization were initiated by

redox initiator or the irradiation of  $^{60}\text{Co}$   $\gamma$ -ray. The structure and the morphol. of the obtained particles affected by the addition methods of styrene and the types of initiation were investigated by using IR spectrum instrument and transmission electron microscopy. The mechanism of the seed emulsion polymerization was also discussed.

IT 168069-46-3P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of core-shell particles consisted of polystyrene-polysiloxane by **seed** emulsion polymerization)

RN 168069-46-3 HCAPLUS

CN Silanediol, dimethyl-, polymer with  $\alpha$ -[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]- $\omega$ -[[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)], ethenylbenzene and methylsilanediol, graft (9CI) (CA INDEX NAME)

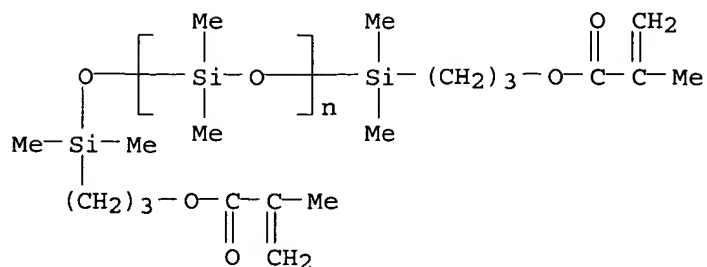
CM 1

CRN 58130-03-3

CMF (C2 H6 O Si)<sub>n</sub> C18 H34 O5 Si2

CCI PMS

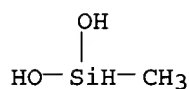




CM 2

CRN 43641-90-3

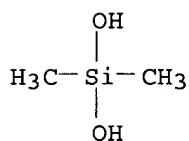
CMF C H6 O2 Si



CM 3

CRN 1066-42-8

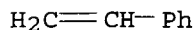
CMF C2 H8 O2 Si



CM 4

CRN 100-42-5

CMF C8 H8



L26 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:451954 HCAPLUS

DOCUMENT NUMBER: 115:51954

TITLE: Manufacture of aqueous vinyl polymer dispersions containing modified siloxanes

INVENTOR(S): Sakai, Takeya; Isobe, Kazuo

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02308801	A2	19901221	JP 1989-131729	19890525

PRIORITY APPLN. INFO.: JP 1989-131729 19890525

AB Title dispersions, storage-stable and water-resistant with low friction, are manufactured by seed-polymerization of 20-99.8% vinyl monomers in the presence of 80-0.2% (as solid) aqueous emulsions of polymers [average particle diameter (D) 0.001-0.2 µm] containing 5-95% siloxane derivative monomers. Thus, polymerizing 100 parts 1:1 Bu acrylate-styrene in the presence of 5 parts aqueous polyurethane emulsion (prepared from di-Me siloxane diol, TDI, diethylenetriamine, and epichlorohydrin, D 0.038 µm) at 70° gave an emulsion with good storage stability (≥2 wk at 50°) and no volume change after vigorous shaking for 30 s, forming water-resistant films with low friction. Polymerization in the presence of a polyurethane emulsion with D 0.24 µm proceeded only to 70% conversion.

IT 72638-33-6 134921-63-4 134921-64-5 134921-65-6 134921-66-7

RL: PROC (Process)

(seed polymerization in presence of, for stable dispersion coatings)

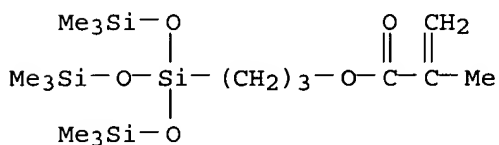
RN 72638-33-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 17096-07-0

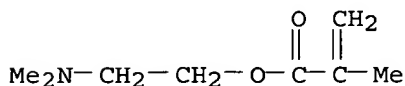
CMF C16 H38 O5 Si4



CM 2

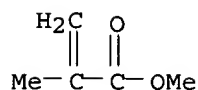
CRN 2867-47-2

CMF C8 H15 N O2



CM 3

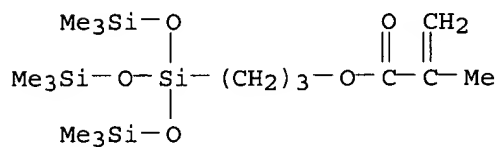
CRN 80-62-6  
CMF C5 H8 O2



RN 134921-63-4 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

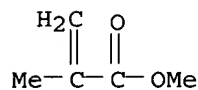
CM 1

CRN 17096-07-0  
CMF C16 H38 O5 Si4



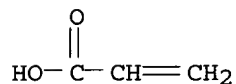
CM 2

CRN 80-62-6  
CMF C5 H8 O2



CM 3

CRN 79-10-7  
CMF C3 H4 O2

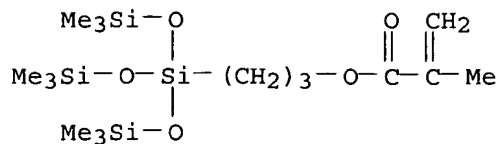


RN 134921-64-5 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 17096-07-0

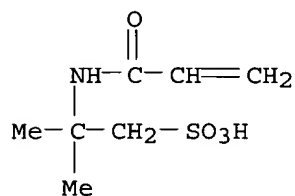
CMF C16 H38 O5 Si4



CM 2

CRN 15214-89-8

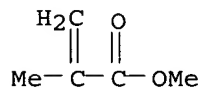
CMF C7 H13 N O4 S



CM 3

CRN 80-62-6

CMF C5 H8 O2



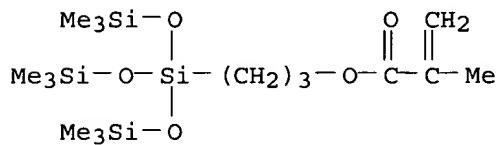
RN 134921-65-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-propenoic acid and 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

CM 1

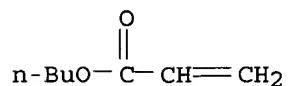
CRN 17096-07-0

CMF C16 H38 O5 Si4



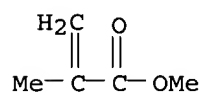
CM 2

CRN 141-32-2  
CMF C7 H12 O2



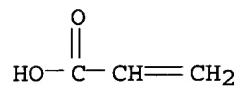
CM 3

CRN 80-62-6  
CMF C5 H8 O2



CM 4

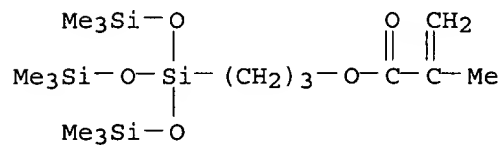
CRN 79-10-7  
CMF C3 H4 O2



RN 134921-66-7 HCAPLUS  
CN 2-Propenoic acid, 2-methyl-, 3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

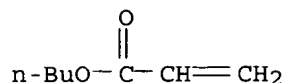
CM 1

CRN 17096-07-0  
CMF C16 H38 O5 Si4



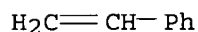
CM 2

CRN 141-32-2  
CMF C7 H12 O2



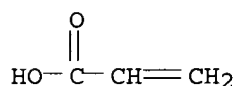
CM 3

CRN 100-42-5  
CMF C8 H8



CM 4

CRN 79-10-7  
CMF C3 H4 O2



L26 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1982:539739 HCAPLUS

DOCUMENT NUMBER: 97:139739

TITLE: Environmental effects of solar thermal power systems.  
Effect of several thermal transfer/storage fluids on  
barley seed germination and seedling growth

AUTHOR(S): Nishita, H.; Haug, R. M.

CORPORATE SOURCE: Lab. Biomed. Environ. Sci., Univ. California, Los  
Angeles, CA, USA

SOURCE: Report (1981), UCLA-12-1315; Order No. DE82002526, 48  
pp. Avail.: NTIS

From: Energy Res. Abstr. 1982, 7(6), Abstr. No. 15976

DOCUMENT TYPE: Report

LANGUAGE: English

AB Plant toxicity threshold level of used thermal transfer/storage materials (Therminol 66 [54578-28-8], Caloria HT43 [83046-05-3], Syltherm 800 [83047-13-6], and Partherm 430 [83046-89-3]) in 4 different soils was determined by using a modified Neubauer technique. The plant toxicity threshold level of toluene, which is a leading candidate for engine working fluid, was also determined. In 3 of the soils (Aiken c.l., Yolo c.l., and Egbert muck), the material tolerated in the least amount was Syltherm 800 and that tolerated in the greatest amount was Caloria HT43 from the Coolidge and Willard projects. In the 4th soil (Soil JF79), the material tolerated in the least and in the greatest amount was Partherm 430 and toluene, resp. Some chemical analyzes of thermal transfer/storage materials were also done. Of the elemental contaminants (Al, Fe, Mn, Co, Cr, Zn, Cu, Cd, Pb, and Ni) determined, only a few occurred in concns. >10 mg/L of oil or 10 µg/g of salt material. These elements were Al in Dow 200, Therminol 66 (Sandia), and Syltherm 800; Fe in Syltherm 800; and Cr and Zn in Partherm 430. Free fatty acids and organic peroxide contents of the used oils were very low, indicating that the heating to which the oils were

subjected did not cause appreciable oxidation Exposure to natural elements (direct solar radiation, ambient air and temperature) for an extended period of time ( $\leq 2$  mo) appeared to cause more oxidation of the oils than heating alone.

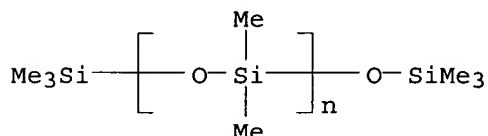
IT 42557-10-8

RL: BIOL (Biological study)

(germination and growth of barley **seeds** response to)

RN 42557-10-8 HCAPLUS

CN Poly[oxy(dimethylsilylene)],  $\alpha$ -(trimethylsilyl)- $\omega$ -  
[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)

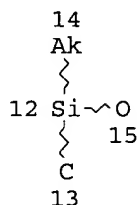
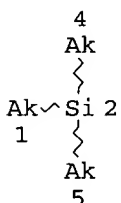


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0 IS NOT A RECOGNIZED COMMAND

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L11 STR



NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

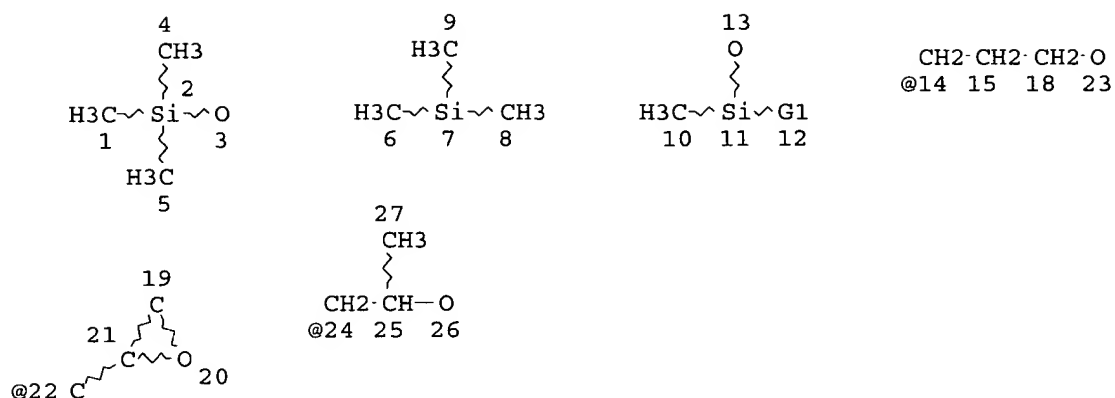
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NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

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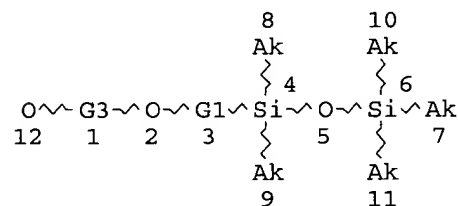
L14 STR



VAR G1=14/22/24  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
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STEREO ATTRIBUTES: NONE  
 L15 STR

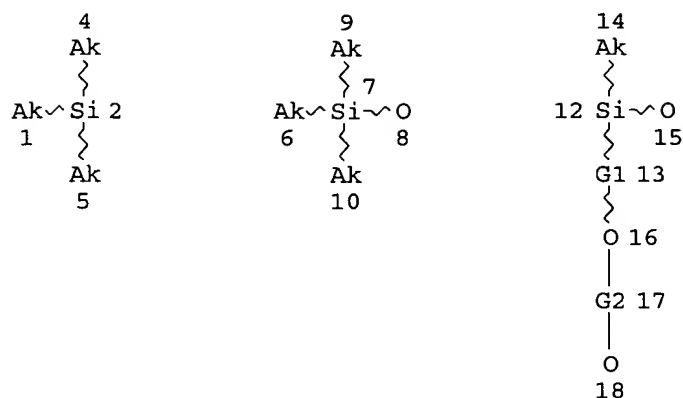


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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE  
 L16 STR





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 NODE ATTRIBUTES:  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 1715 SEA FILE=REGISTRY SUB=L13 SSS FUL L14 OR L15 OR L16  
 L18 1163 SEA FILE=HCAPLUS ABB=ON PLU=ON L17  
 L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR  
 "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR  
 COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS  
 (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV  
 OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR  
 "ALMOND (PRUNUS AMYGDALUS)"/CV OR ALMONDS/CV OR "ANACARDIUM  
 OCCIDENTALE"/CV OR "ANACARDIUM OCCIDENTALE NANUM"/CV OR  
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 UM OCCIDENTALE) (L) FLOUR"/CV OR "CASHEW (L) FLOUR"/CV OR  
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 JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) JUGLANS  
 AILANTHIFOLIA CORDIFORMIS"/CV OR "JUGLANS AUSTRALIS"/CV OR  
 "JUGLANS BOLIVIANA"/CV OR "JUGLANS CALIFORNICA"/CV OR "JUGLANS  
 CATHAYENSIS"/CV OR "JUGLANS CINEREA"/CV OR "JUGLANS GUATEMALENS  
 IS"/CV OR "JUGLANS HINDSII"/CV OR "JUGLANS MAJOR"/CV OR  
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 OLANCHANA"/CV OR "JUGLANS REGIA"/CV OR "JUGLANS REGIA FALLAX"/C  
 V OR "JUGLANS REGIA MEMBRANICA"/CV OR "JUGLANS REGIA ORIENTALIS  
 "/CV OR "WALNUT (JUGLANS REGIA FALLAX)"/CV OR "WALNUT (JUGLANS  
 REGIA MEMBRANICA)"/CV OR "WALNUT (JUGLANS REGIA ORIENTALIS)"/CV

OR "WALNUT (L) J. REGIA ORIENTALIS"/CV OR "WALNUT (L) JUGLANS  
 REGIA FALLAX"/CV OR "WALNUT (L) JUGLANS REGIA MEMBRANICA"/CV  
 OR "WALNUT (L) JUGLANS REGIA ORIENTALIS"/CV OR "JUGLANS  
 SIGILLATA"/CV OR "JUGLANS SINENSIS"/CV OR WAL

L20 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19  
 L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L) L19  
 L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21  
 L23 105764 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT L17  
 L24 49001 SEA FILE=HCAPLUS ABB=ON PLU=ON L23  
 L25 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L24(L) L19  
 L26 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L21 OR L22)  
 L40 205 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L) (APPL? OR TREAT? OR  
 CONTACT? OR COAT?)  
 L41 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND AGROCHEM?  
 L42 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT (L21 OR L22 OR L26)

=> d ibib abs hitstr l42 1-3

L42 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:136458 HCAPLUS  
 DOCUMENT NUMBER: 142:192777  
 TITLE: **Agrochemical** compositions for bark  
 application to woody plants  
 INVENTOR(S): Stringfellow, William  
 PATENT ASSIGNEE(S): Quest Products Corporation, USA  
 SOURCE: PCT Int. Appl., 14 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005013693	A1	20050217	WO 2004-US25498	20040806
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2003-493636P P 20030808  
 US 2003-493637P P 20030808

OTHER SOURCE(S): MARPAT 142:192777

AB An **agrochem.** composition for topical application to woody plant periderm comprises an insecticide or a plant growth regulator, an organosiloxane surfactant and water.

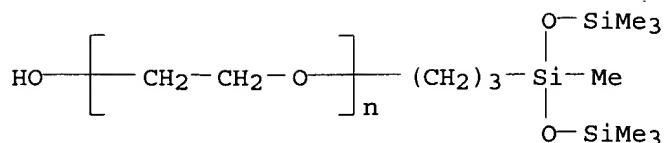
IT 67674-67-3

RL: MOA (Modifier or additive use); USES (Uses)  
 (in **agrochem.** compns. for bark **application** to woody plants)

RN 67674-67-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX

NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:597634 HCAPLUS

DOCUMENT NUMBER: 131:253644

TITLE: Adjuvant helping effects on foliar application of cyhalofop butyl

AUTHOR(S): Kondo, Naohiko; Shiraishi, Ikuo; Matsuya, Kuni; Matsumoto, Tetsuo

CORPORATE SOURCE: Ogori Dev. Center, Dow Chem. Japan Ltd., Ogori, 838-0113, Japan

SOURCE: Nippon Noyaku Gakkaishi (1999), 24(3), 290-292  
CODEN: NNGADV; ISSN: 0385-1559

PUBLISHER: Nippon Noyaku Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

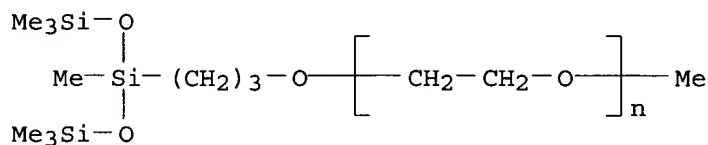
AB Of 7 adjuvants tested, Polyglycol 26-2 (I) was most effective for enhancing the effectiveness of cyhalofop Bu (II) emulsion applied to Echinochloa crus-galli at 2- to 3-leaf stages. Over 90% control of E. crus-galli were given at 2- to 3-leaf stages by 60 g/ha II with 0.1-0.4% I and at 4- to 5-leaf stage by 120 g/ha II with 0.2-0.4% I. No phytotoxic symptom was observed on rice plants treated with 360 g/ha II with 0.4% I up to 4 wk after application. Addition of I at 0.1-0.4% to II emulsion significantly enhanced the rainfastness of II sprayed onto E. crus-galli.

IT 27306-78-1, Silwet L-77

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)  
(adjuvant helping effects on foliar application of cyhalofop Bu)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



L42 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:576732 HCAPLUS

DOCUMENT NUMBER: 122:308764

TITLE: Alkylsiloxanes as adjuvants for agriculture.

INVENTOR(S): Murphy, Gerald J.; Policello, George A.

PATENT ASSIGNEE(S): OSI Specialties Inc., USA

SOURCE: Eur. Pat. Appl., 19 pp.

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 648413	A1	19950419	EP 1994-116017	19941011
EP 648413	B1	19980311		
R: DE, ES, FR, GB, GR, IE, IT				
US 5561099	A	19961001	US 1993-135916	19931013
IL 111121	A1	19990509	IL 1994-111121	19940930
BR 9404053	A	19950613	BR 1994-4053	19941011
JP 07187903	A2	19950725	JP 1994-271682	19941011
JP 2894546	B2	19990524		
ES 2113024	T3	19980416	ES 1994-116017	19941011
AU 9475810	A1	19950504	AU 1994-75810	19941013
AU 680940	B2	19970814		

PRIORITY APPLN. INFO.: US 1993-135916 A 19931013

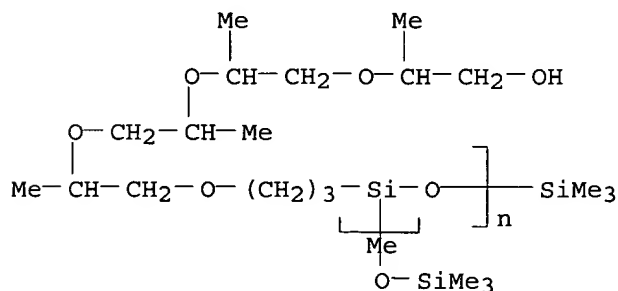
AB Linear alkylsilicone compds. of the formula  $(\text{Me}_3\text{SiO}(\text{Me}_2)(\text{SiO})_x\text{MeR}(\text{SiO})_y\text{SiMe}_3$  (wherein  $x = 0-20$ ,  $y = 1-10$ ,  $R = \text{C}_6-16$  alkyl or alkyl ester group) or cyclic alkylsilicone compds.  $[(\text{Me})_2\text{SiO}]_m[\text{MeRSiO}]_n$  (where  $m = 0-4$ , and  $n = 1-5$ , provided that  $m + n = 3-5$ ) are adjuvants for agricultural applications of oil-containing compns. Especially preferred alkylsilicones have a d.p. of  $\leq 6$  and an alkyl content of  $\leq 50\%$  by weight. The compds. potentiate spreading of mineral or vegetable oils or oil-containing emulsions in dormant spray oils, crop oil concs., pesticides, and the like on difficult-to wet surfaces such as waxy leaf cuticles and arthropod exoskeletons.

IT 163392-82-3 163392-83-4

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
 (alkylsiloxane adjuvants for agricultural applications)

RN 163392-82-3 HCAPLUS

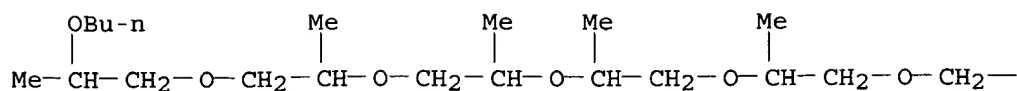
CN Poly[oxy(16-hydroxy-1,7,10,12,15-pentamethyl-5,8,11,14-tetraoxa-1-sila-hexadec-1-ylidene)],  $\alpha$ -(trimethylsilyl)- $\omega$ -[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



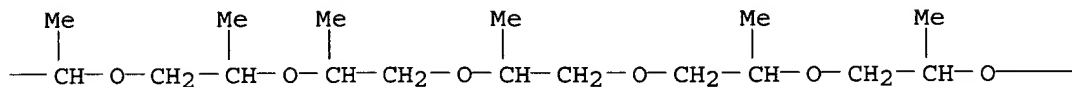
RN 163392-83-4 HCAPLUS

CN Poly[oxy(1,7,10,12,15,19,22,24,27,31,34,36,39,43-tetradecamethyl-5,8,11,14,17,20,23,26,29,32,35,38,41,44-tetradeca-1-sila-octa-tetracont-1-ylidene)],  $\alpha$ -(trimethylsilyl)- $\omega$ -[(trimethylsilyl)oxy]- (9CI)  
 (CA INDEX NAME)

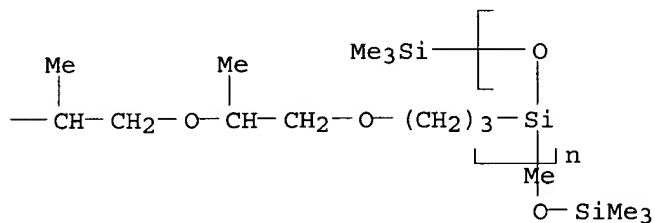
PAGE 1-A



PAGE 1-B



PAGE 1-C



=> => d stat que 145

L11 STR

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Ak~Si 2  
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~  
Ak  
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Ak  
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~ 15  
C  
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

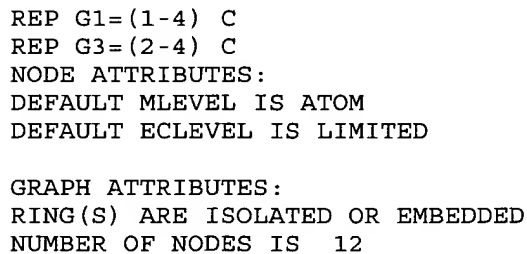
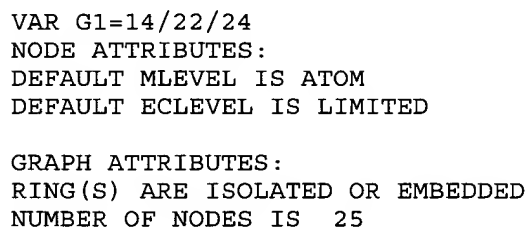
RING(S) ARE ISOLATED OR EMBEDDED

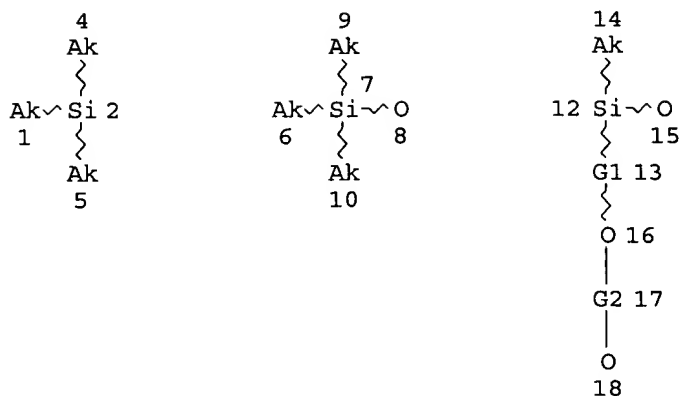
NUMBER OF NODES IS 8

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L13 107479 SEA FILE=REGISTRY SSS FUL L11

L14 STR





REP G1=(1-4) C  
 REP G2=(2-4) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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STEREO ATTRIBUTES: NONE

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L20 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19

L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)L19

L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21

L23 105764 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT L17

L24 49001 SEA FILE=HCAPLUS ABB=ON PLU=ON L23

L25 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 (L)L19

L26 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L21 OR L22)

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L41 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND AGROCHEM?

L42 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT (L21 OR L22 OR L26)

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L44 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND (L24 OR L18)

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=> d ibib abs hitstr l45 1-2

L45 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:309037 HCAPLUS

DOCUMENT NUMBER: 130:334143

TITLE: Physicochemical properties of several commercial organosilicones, their blends, and selected other adjuvants

AUTHOR(S): Sun, Jinxia; Foy, Chester L.

CORPORATE SOURCE: Citrus Research and Education Center, University of Florida, Lake Alfred, FL, 33850, USA

SOURCE: ASTM Special Technical Publication (1998), STP 1347(Pesticide Formulations and Application Systems: 18th Volume), 281-293

CODEN: ASTTA8; ISSN: 0066-0558

PUBLISHER: ASTM

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The study was conducted to investigate the physicochem. properties and the spread pattern on velvetleaf (*Abutilon theophrasti* Medikus) foliage of several organosilicones, oil concs., nonionic adjuvants, and adjuvant mixts. A dynamic contact angle analyzer, surface tensiometer, and goniometer were used to measure the static surface tension, dynamic surface tension, and contact angle, resp., of solns. made with these adjuvants. The progress of droplet spread of different adjuvant solns. containing fluorescent dye on leaves of velvetleaf was recorded by image analyzer. Organosilicones were superior wetting agents and showed excellent spreading patterns on velvetleaf foliage. In addition, organosilicones not only exhibited extremely low static surface tension, but also showed superior performance in lowering dynamic surface tension. A logistic dose response relationship existed between adjuvant concentration and contact angle on para film. However, across a wide range of concns., there was no clear relationship between surface tension and contact angle even in a homogeneous adjuvant solution; although, at normal use rates, the lower the surface tension, the lower the contact angle should be on target surfaces.

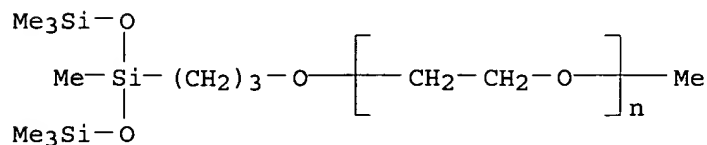
IT 27306-78-1, Silwet L-77 67674-67-3, Silwet 408



RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)  
(adjuvant physicochem. properties and spread patterns on leaves)

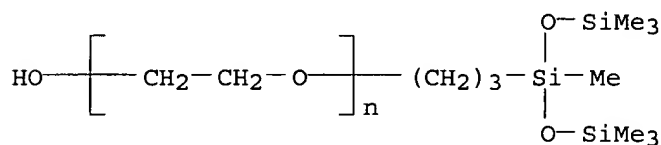
RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



RN 67674-67-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-  
[(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:309036 HCAPLUS

DOCUMENT NUMBER: 130:348505

TITLE: Correlation of adjuvant physicochemical properties and glyphosate efficacy

AUTHOR(S): Sun, Jinxia; Singh, Megh

CORPORATE SOURCE: Witco Corporation, Tarrytown, NY, 10591, USA

SOURCE: ASTM Special Technical Publication (1998), STP 1347 (Pesticide Formulations and Application Systems: 18th Volume), 273-280

CODEN: ASTTA8; ISSN: 0066-0558

PUBLISHER: ASTM

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Greenhouse expts. were conducted to investigate the effect of adjuvants on glyphosate efficacy. Adjuvants evaluated were Silwet L-77, Kinetic, Dyne-Amic, Impact, Induce, Optima, LI-700, Freeway, X-77, and Agri-Dex. Tested weed species were redroot pigweed (*Amaranthus retroflexus* L.) and barnyard grass [*Echinochloa crus-galli* (L.) Beauv.]. Glyphosate, at 0.56 kg/ha, combined with adjuvants resulted equal or better control in both weed species. Optima was most effective for enhancing glyphosate efficacy. However, the combination of glyphosate with either Induce or Freeway showed antagonism. Correlation of adjuvant physico-chemical properties and glyphosate efficacy was also analyzed. Contact angle and spreading coefficient had significant effect on glyphosate efficacy 1 wk after treatment (WAT). As the time interval increased to 2, 3, and 4 WAT, the significance of the correlation decreased.

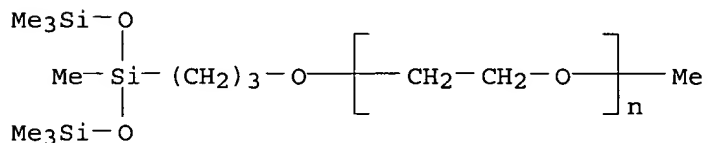
IT 27306-78-1, Silwet L-77

RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(effect of adjuvants and their on physicochem. properties on the herbicidal activity of glyphosate)

RN 27306-78-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-[(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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 L16 STR  
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 L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR "ALMOND (PRUNUS AMYGDALUS)"/CV OR ALMONDS/CV OR "ANACARDIUM OCCIDENTALE"/CV OR "ANACARDIUM OCCIDENTALE NANUM"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE NANUM)"/CV OR "CASHEW (ANACARDIUM OCCIDENTALE) (L) FLOUR"/CV OR "CASHEW (L) FLOUR"/CV OR "FLOURS AND MEALS (L) CASHEW FLOUR"/CV OR "BERTHOLETTIA EXCELSA"/CV OR "BRAZIL NUT"/CV OR "BRAZIL NUT (BERTHOLETTIA EXCELSA)"/CV OR "BRAZIL NUTS"/CV OR "BRAZIL-NUTS"/CV OR "CARYA ILLINOINENSIS"/CV OR CASHEW/CV OR "CASHEW (ANACARDIUM OCCIDENTALE)"/CV OR JUGLANS/CV OR BUTTERNUT/CV OR "JUGLANS AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA AILANTHIFOLIA)"/CV OR "WALNUT (JUGLANS AILANTHIFOLIA CORDIFORMIS)"/CV OR "WALNUT (L) J. AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) J. AILANTHIFOLIA CORDIFORMIS"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA AILANTHIFOLIA"/CV OR "WALNUT (L) JUGLANS AILANTHIFOLIA CORDIFORMIS"/CV OR "JUGLANS AUSTRALIS"/CV OR "JUGLANS BOLIVIANA"/CV OR "JUGLANS CALIFORNICA"/CV OR "JUGLANS CATHAYENSIS"/CV OR "JUGLANS CINEREA"/CV OR "JUGLANS GUATEMALENSIS"/CV OR "JUGLANS HINDSII"/CV OR "JUGLANS MAJOR"/CV OR "JUGLANS MANDSHURICA"/CV OR "JUGLANS MICROCARPA"/CV OR "JUGLANS NEOTROPICA"/CV OR "JUGLANS NIGRA"/CV OR "JUGLANS OLANCHANA"/CV OR "JUGLANS REGIA"/CV OR "JUGLANS REGIA FALLAX"/CV OR "JUGLANS REGIA MEMBRANICA"/CV OR "JUGLANS REGIA ORIENTALIS"/CV OR "WALNUT (JUGLANS REGIA FALLAX)"/CV OR "WALNUT (JUGLANS REGIA MEMBRANICA)"/CV OR "WALNUT (JUGLANS REGIA ORIENTALIS)"/CV OR "WALNUT (L) J. REGIA ORIENTALIS"/CV OR "WALNUT (L) JUGLANS REGIA FALLAX"/CV OR "WALNUT (L) JUGLANS REGIA MEMBRANICA"/CV OR "WALNUT (L) JUGLANS REGIA ORIENTALIS"/CV OR "JUGLANS SIGILLATA"/CV OR "JUGLANS SINENSIS"/CV OR WAL

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 L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)L19  
 L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21  
 L23 105764 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT L17  
 L24 49001 SEA FILE=HCAPLUS ABB=ON PLU=ON L23  
 L25 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L24(L)L19  
 L26 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L21 OR L22)  
 L40 205 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L) (APPL? OR TREAT? OR  
 CONTACT? OR COAT?)  
 L41 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND AGROCHEM?  
 L42 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT (L21 OR L22 OR L26)  
 L43 8 SEA FILE=HCAPLUS ABB=ON PLU=ON ("SUN JINXIA"/AU OR "SUN  
 JINXIA SUSAN"/AU)  
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=> d ibib abs hitstr l47 1-6

L47 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:393873 HCAPLUS

DOCUMENT NUMBER: 143:327950

TITLE: Analysis and characterization of acetylated sugarcane bagasse hemicelluloses

AUTHOR(S): Xu, Fen; Sun, Run-Cang; Sun, Xaio-Feng; Geng, ZhenChao; Xiao, Bin; **Sun, JinXia**

CORPORATE SOURCE: State Key Laboratory of Pulp and Paper Engineering, South China University of Technology, Guangzhou, Peop. Rep. China

SOURCE: International Journal of Polymer Analysis and Characterization (2004), 9(4), 229-244  
 CODEN: IPACEZ; ISSN: 1023-666X

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Acetylation of sugarcane bagasse hemicelluloses with acetic anhydride using N-bromosuccinimide (NBS) as a catalyst in N,N-dimethylformamide/LiCl system under mild conditions was comparatively studied. The yield and the degree of substitution (DS) ranged from 68.2% and 0.37 to 78.6% and 0.82 as a function of experiment conditions. It was found that the yield and DS increased with N-bromosuccinimide concentration between 0.5 and 1.0%, reaction temperature from 18 to 80°, and reaction time between 2 and 4 h. In comparison, other catalysts such as H2SO4 and 4 tertiary amine catalysts, pyridine, 4-dimethylaminopyridine, N-Me pyrrolidine, and N-Me pyrrolidinone, were also investigated. The results showed that NBS can be used as a novel and effective catalyst for acetylation of hemicelluloses under extremely mild reaction conditions. The new polymeric products were characterized by FT-IR, 13C NMR spectroscopy, and thermal anal. The thermal stability of the material was increased by chemical modification.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:300441 HCAPLUS

DOCUMENT NUMBER: 138:323366

TITLE: Emulsifiable concentrate compositions with silicone antifoams

INVENTOR(S): **Sun, Jinxia**; Scott, Charles; Ruckle, Robert

PATENT ASSIGNEE(S): E.; Policello, George A.  
 SOURCE: USA  
 U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S.  
 Ser. No. 478,589, abandoned.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003072776	A1	20030417	US 2001-905844	20010713
PRIORITY APPLN. INFO.:			US 2000-478589	B2 20000106

AB A foam control agent for emulsifiable concs. and its use therein is disclosed wherein the agent comprises a soluble organosilicon of the formula:  $(R_2(R_1)_2SiO_{1/2})_e(SiO_{4/2})_f(SiO_{3/2}R_1)_g(SiO_{2/2}(R_1)_2)_x(SiO_{2/2}R_1Z)_y$  wherein:  $e = 2f + g + 2$ ;  $f = 0$  to  $2$ ;  $g = 0$  to  $2$ ;  $x = 30$  to  $150$ ;  $y = 0$  to  $30$ ; where, when  $y > 0$ ,  $x/y = 4$  to  $18$  and  $x + y \geq 30$ , and when  $y = 0$ , the ratio  $x/e$  is in the range of from .apprx.20/1 to .apprx.10/1;  $R_1$  = alkyl of 1 to 18 carbon atoms;  $R_2 = R_1$  or  $Z$ , provided that when  $y = 0$ ,  $R_2 = Z$ ;  $Z = R_3OBnG$ ;  $R_3$  is a divalent bridging group of two to four carbons;  $B$  is an alkylene oxide group containing two to four carbon atoms, wherein less than ten mole percent of the alkylene oxide functionality is ethylene oxide;  $n = 8$  to  $30$ ; and  $G$  = hydrogen, a C1-C18 hydrocarbon radical, or acetyl.

L47 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:574836 HCAPLUS  
 DOCUMENT NUMBER: 137:121065  
 TITLE: Paste formulation for plant seed treatment containing organosilicon additive  
 INVENTOR(S): Sun, Jinxia  
 PATENT ASSIGNEE(S): Crompton Corporation, USA  
 SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058454	A1	20020801	WO 2002-US1437	20020122
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002147111	A1	20021010	US 2001-769388	20010126
CA 2434225	AA	20020801	CA 2002-2434225	20020122
EP 1353543	A1	20031022	EP 2002-707517	20020122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002006660	A	20040622	BR 2002-6660	20020122
NZ 527049	A	20050225	NZ 2002-527049	20020122
PRIORITY APPLN. INFO.:			US 2001-769388	A 20010126

WO 2002-US1437 W 20020122

AB A composition comprises a seed treatment formulation and an organosilicon additive of the formula  $R_2Si(R_1)(R_1)[OSi(R_1)(R_1)]_x[OSi(R_1)(Z)]_yOSi(R_1)(R_1)R_2$  (X = 0-30; Y = 0-10 ; R<sub>1</sub>, R<sub>2</sub> = C<sub>1</sub>-C<sub>18</sub> alkyl, provided that, if Y = 0, at least one R<sub>2</sub> = Z; Z = R<sub>3</sub>OBnG; R<sub>3</sub> = C<sub>1</sub>-C<sub>4</sub> alkylene; B = ethylene oxide, propylene oxide, butylene oxide, and mixts. thereof; n = 1-50 if, and only if, B contains ethylene oxide, otherwise n = 1-10 ; G = H, C<sub>1</sub>-C<sub>18</sub> hydrocarbon, and acetyl).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:507471 HCAPLUS

DOCUMENT NUMBER: 135:103790

TITLE: Emulsifiable concentrate pesticide compositions with organosilicon antifoams

INVENTOR(S): Sun, Jinxia; Scott, Charles; Ruckle, Robert E.; Policello, George A.

PATENT ASSIGNEE(S): Crompton Corporation, USA

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001049114	A2	20010712	WO 2001-US570	20010105
WO 2001049114	A3	20020110		
W: AU, BR, CA, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1244354	A2	20021002	EP 2001-901872	20010105
EP 1244354	B1	20031119		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001007432	A	20030225	BR 2001-7432	20010105
JP 2003519160	T2	20030617	JP 2001-549492	20010105
AT 254397	E	20031215	AT 2001-901872	20010105
NZ 519941	A	20040528	NZ 2001-519941	20010105
AU 775738	B2	20040812	AU 2001-27726	20010105
PRIORITY APPLN. INFO.:			US 2000-478589	A 20000106
			WO 2001-US570	W 20010105

AB The invention relates to a foam control agent in homogeneous mixture (i.e., one phase) with an emulsion concentrate (EC) pesticidal compns. The EC comprise

an organic solvent, soluble organic pesticide or mixts. of organic solvent soluble organic

pesticides, emulsifiers, and an organosilicon foam control agent that is soluble in the EC matrix. The organosilicon is  $[(R_1R_2)_2SiO_{1/2}]_e(SiO_{4/2})_f(SiO_{3/2}R_1)_g(SiO_{2/2}R_1Z)_x(SiO_{2/2}R_1Z)_y$  (e = 2\*f+g+2; f, g = 0, 1 or 2; x = 30-130; y = 0, 1-30; when y > 0, x/y = 4-18; x+y ≤ 30; when y = 0, x/e = 20/1 to 10/1; R<sub>1</sub> = alkyl; R<sub>2</sub> = R<sub>1</sub> or Z = R<sub>3</sub>OBnG; R<sub>3</sub> C<sub>2</sub>-4 divalent bridging group; B = alkylene oxide group; n = 8-30; G = H or hydrocarbyl).

L47 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:11556 HCAPLUS

DOCUMENT NUMBER: 126:43933

TITLE: Characterization of organosilicone surfactants and

their effects on sulfonyleurea herbicide activity  
 AUTHOR(S): Sun, Jinxia Susan  
 CORPORATE SOURCE: Virginia Polytechnic Institute and State Univ.,  
 Blacksburg, VA, USA  
 SOURCE: (1996) 133 pp. Avail.: Univ. Microfilms Int., Order  
 No. DA9637454  
 From: Diss. Abstr. Int., B 1997, 57(7), 4238  
 DOCUMENT TYPE: Dissertation  
 LANGUAGE: English  
 AB Unavailable

L47 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:432663 HCAPLUS  
 DOCUMENT NUMBER: 125:107693  
 TITLE: Effect of organosilicone surfactants on the  
 rainfastness of primisulfuron in velvetleaf (Abutilon  
 theophrasti)  
 AUTHOR(S): Sun, Jinxia; Foy, Chester L.; Witt, Harold  
 L.  
 CORPORATE SOURCE: Dep. Plant Pathol., Physiol. and Weed Sci., Virginia  
 Polytech. Inst. and State Univ., Blacksburg, VA,  
 24061, USA  
 SOURCE: Weed Technology (1996), 10(2), 263-267  
 CODEN: WETEE9; ISSN: 0890-037X  
 PUBLISHER: Weed Science Society of America  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Greenhouse expts. were conducted to evaluate the influence of three  
 organosilicone surfactants (Silwet L-77, Silwet 408, and Sylgard 309) and  
 two blends of organosilicone surfactants with conventional adjuvants  
 (Dyne-Amic and Kinetic) on the rainfastness of primisulfuron in  
 velvetleaf. Four conventional adjuvants, Rigo Oil Concentrate, Agri-Dex,  
 methylated soybean oil, and X-77 were selected for comparison.  
 Primisulfuron at 40 g ai/ha was applied alone or with the organosilicones,  
 blends, or X-77 at 0.25% (volume/volume); the other adjuvants were tested at  
 1% (volume/volume). Simulated rainfall (1.25 cm/0.5 h) was applied at 0.25,  
 0.5, 1, or 2 h after treatment. Control ratings were made at 5-d  
 intervals and shoot fresh wts. were recorded 20 DAT. The organosilicone  
 surfactants significantly increased the rainfastness of primisulfuron,  
 even when simulated rainfall was applied at 0.25 or 0.5 h after treatment.  
 Rigo Oil Concentrate and Kinetic also increased rainfastness when rainfall was  
 applied 1 h after treatment. Differences among adjuvants were not as  
 apparent when rainfall was applied 2 h after treatment. Regardless of the  
 timing of simulated rainfall after treatment, there were significant  
 differences between treatments and nontreated check; however, control was  
 not acceptable in several instances.

=> => d stat que  
 L11 STR

4  
 Ak  
 }  
 }  
 Ak~Si 2  
 1  
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 Ak  
 5

14  
 Ak  
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 }  
 12 Si~O  
 } 15  
 C  
 13

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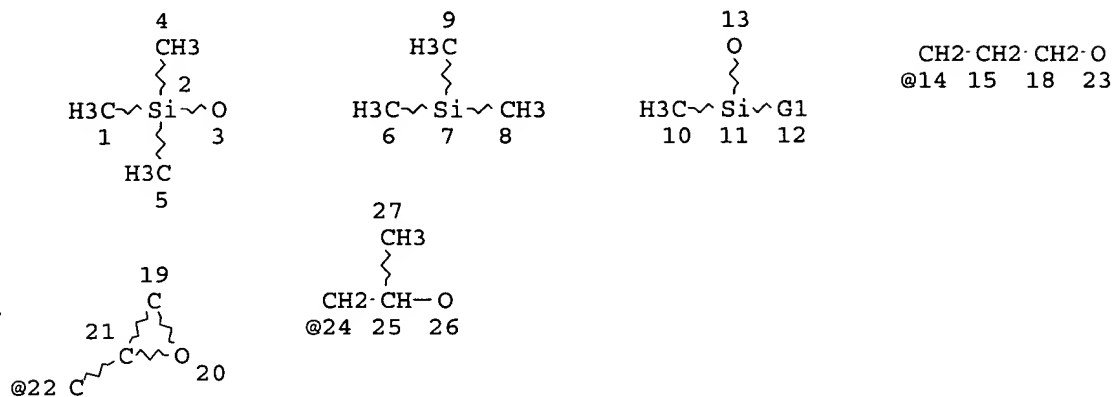
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DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE

L13 107479 SEA FILE=REGISTRY SSS FUL L11

L14 STR



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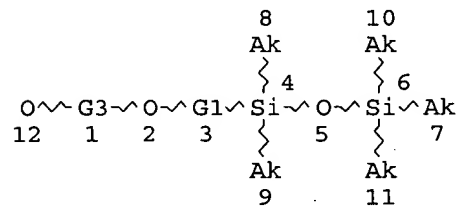
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STEREO ATTRIBUTES: NONE

L15 STR



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REP G3=(2-4) C

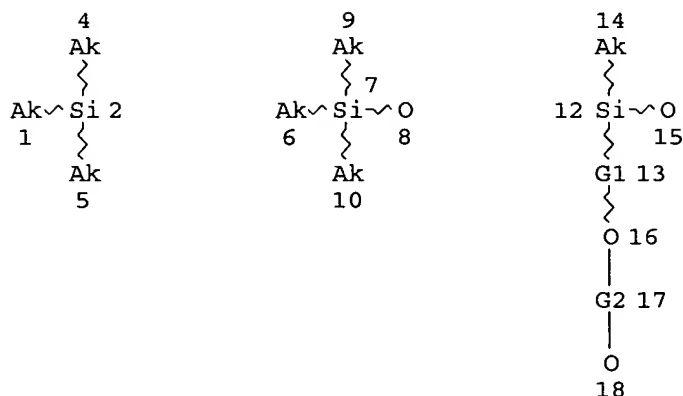
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
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STEREO ATTRIBUTES: NONE

L16 STR



REP G1=(1-4) C  
 REP G2=(2-4) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 16

STEREO ATTRIBUTES: NONE

L17 1715 SEA FILE=REGISTRY SUB=L13 SSS FUL L14 OR L15 OR L16  
 L18 1163 SEA FILE=HCAPLUS ABB=ON PLU=ON L17  
 L19 231076 SEA FILE=HCAPLUS ABB=ON PLU=ON (SEED/CV OR SEEDS/CV OR  
 "PLANT SEED"/CV OR "SEED (PLANT)"/CV OR ALEURONE/CV OR  
 COTTONSEED/CV OR "COTTONSEED FLOUR"/CV OR "FLOURS AND MEALS  
 (L) COTTONSEED FLOUR"/CV OR COTYLEDON/CV OR "EMBRYO, PLANT"/CV  
 OR "HULLS OR HUSKS"/CV OR "NUT (SEED)"/CV OR ALMOND/CV OR  
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L20 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19  
 L21 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L)L19  
 L22 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L21  
 L23 105764 SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT L17  
 L24 49001 SEA FILE=HCAPLUS ABB=ON PLU=ON L23  
 L25 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L24(L)L19  
 L26 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT (L21 OR L22)  
 L40 205 SEA FILE=HCAPLUS ABB=ON PLU=ON L18(L) (APPL? OR TREAT? OR  
 CONTACT? OR COAT?)  
 L41 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND AGROCHEM?  
 L42 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT (L21 OR L22 OR L26)  
 L43 8 SEA FILE=HCAPLUS ABB=ON PLU=ON ("SUN JINXIA"/AU OR "SUN  
 JINXIA SUSAN"/AU)  
 L44 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND (L24 OR L18)  
 L45 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L44 NOT (L21 OR L22 OR L26 OR  
 L42)  
 L46 1064 SEA FILE=HCAPLUS ABB=ON PLU=ON ("SUN J"/AU OR "SUN J B"/AU  
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 G"/AU OR "SUN J H"/AU OR "SUN J J"/AU OR "SUN J L"/AU OR "SUN  
 J M"/AU OR "SUN J N"/AU OR "SUN J P"/AU OR "SUN J Q"/AU OR  
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 SUSAN"/AU OR "SUN J T"/AU OR "SUN J W"/AU OR "SUN J X"/AU OR  
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 L47 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 NOT L45  
 L50 1 SEA FILE=HCAPLUS ABB=ON PLU=ON (L46 AND (L24 OR L18)) NOT  
 (L21 OR L22 OR L26 OR L42 OR L45 OR L47)

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L50 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:627996 HCAPLUS

DOCUMENT NUMBER: 125:268089

TITLE: Structurally related organosilicone surfactants, their  
 physical-chemical properties and effects on uptake and  
 efficacy of primisulfuron in velvetleaf (Abutilon  
 theophrasti Medicus)

AUTHOR(S): Sun, J.; Foy, C. L.

CORPORATE SOURCE: Department Plant Pathology, Virginia Polytechnic  
 Institute and State University, Blacksburg, VA, 24061,  
 USA

SOURCE: FRI Bulletin (1996), Volume Date 1995, 193 (Proceedings  
 of the Fourth International Symposium on Adjuvants for  
 Agrochemicals, 1995), 225-230  
 CODEN: FRIBJ; ISSN: 0111-8129

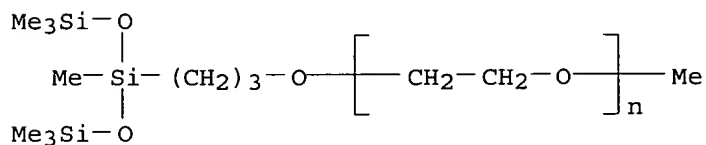
PUBLISHER: New Zealand Forest Research Institute

DOCUMENT TYPE: Journal

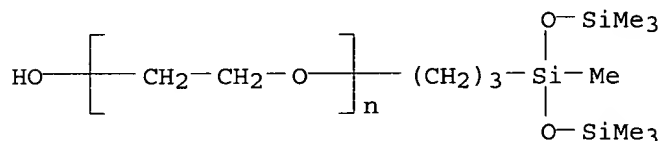
LANGUAGE: English

AB The phys.-chemical properties and spread pattern on leaves of velvetleaf were  
 similar for four structurally related organosilicones. Laboratory results  
 indicated that the four organosilicones greatly increased the uptake of  
 primisulfuron in velvetleaf. When primisulfuron was combined with any one  
 of the four organosilicones, weed control was significantly increased and  
 much more rapid than when the herbicide was used alone. There were no  
 significant differences among the four structurally related  
 organosilicones used as adjuvants with primisulfuron in velvetleaf.

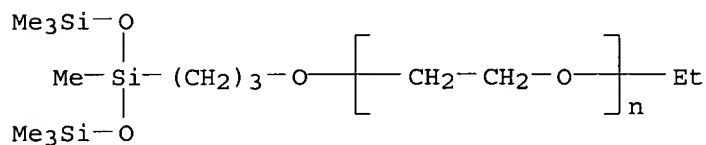
IT 27306-78-1, Silwet L-77 67674-67-3, Silwet 408  
 142619-63-4, Y 12719 182626-28-4, Y 12720  
 RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL  
 (Biological study); USES (Uses)  
 (effect on uptake, translocation and efficacy of primisulfuron in  
 velvetleaf)  
 RN 27306-78-1 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -methyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
 [(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



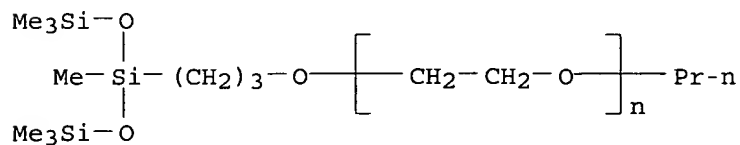
RN 67674-67-3 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -[3-[1,3,3,3-tetramethyl-1-  
 [(trimethylsilyl)oxy]disiloxanyl]propyl]- $\omega$ -hydroxy- (9CI) (CA INDEX  
 NAME)



RN 142619-63-4 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -ethyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
 [(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



RN 182626-28-4 HCAPLUS  
 CN Poly(oxy-1,2-ethanediyl),  $\alpha$ -propyl- $\omega$ -[3-[1,3,3,3-tetramethyl-1-  
 [(trimethylsilyl)oxy]disiloxanyl]propoxy]- (9CI) (CA INDEX NAME)



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